3 1761 04282 4193

HV
6125
E6

EUGENICS RECORD OFFICE—MEMOIR No. 2

THE NAM FAMILY

A STUDY IN CACOGENICS

BY

ARTHUR H. ESTABROOK

EUGENICS RECORD OFFICE

AND

CHARLES B. DAVENPORT

CARNEGIE INSTITUTION OF WASHINGTON

WITH FOUR CHARTS AND FOUR TEXT FIGURES

COLD SPRING HARBOR, LONG ISLAND, N. Y.

AUGUST, 1912

EUGENICS RECORD OFFICE—MEMOIR No. 2

THE NAM FAMILY

A STUDY IN CACOGENICS

BY

ARTHUR H. ESTABROOK

EUGENICS RECORD OFFICE

AND

CHARLES B. DAVENPORT

CARNEGIE INSTITUTION OF WASHINGTON

WITH FOUR CHARTS AND FOUR TEXT FIGURES

ONTARIO COLLEGE OF EDUCATION
DEPT. OF EDUCATIONAL RESEARCH
UNIVERSITY OF TORONTO

COLD SPRING HARBOR, LONG ISLAND, N. Y.
AUGUST, 1912

SEEN BY PRESERVATION SERVICES
DATE.....

COPYRIGHT, 1912
BY EUGENICS RECORD OFFICE

HV
6125
E6

678976
2.7.58

PRESS OF
THE NEW ERA PRINTING COMPANY
LANCASTER, PA.

TABLE OF CONTENTS

PAGE

1. Introduction 1
2. Early History of the Nam Family 2
3. First and Second Generations 3
4. Line A 4
5. Line B 15
6. Line C 19
7. Line D 25
8. Line E 28
9. Line F 35
10. The Nap Family 35
11. Line G 35
12. The Nars and their Union with the Naps 37
13. Line G (continued) 40
14. Line H 42
15. The Nats (Line I) 42
16. Summary of Characteristics 45
17. The Population Considered 65
18. Social Statistics 65
19. The Inheritableness of the Non-social Traits 66
    a. Indolence 66
    b. Alcoholism 67
    c. Licentiousness 68
    d. Forwardness vs. Shyness 71
20. Consanguinity in Marriage 71
21. Fecundity 73
22. Causes of Death 74
23. Relative Effect of Changing the Environment and Changing the Blood. 75
    a. Comparison of Half Brothers and Sisters 76
    b. Effect of "Adoption Out" and of Life in the Orphan Asylum 79
    c. Consequences of Removal to a New Locality 81
24. Social Prophylaxis 84

Literature cited 85

THE NAM[1] FAMILY

A STUDY IN CACOGENICS[2]

1. Introduction

With the assistance of funds generously contributed by Mrs. E. H. Harriman a study was undertaken by Dr. Estabrook, in the winter and spring of 1911–12, under the direction of the Eugenics Record Office of Cold Spring Harbor, of a highly inbred rural community of New York State, wholly unconnected with that which Dugdale made famous in his study of "The Jukes." During many months Dr. Estabrook went in and out among these people daily.

Several such studies have already been made and reported on in print; and each of them has revealed a community whose hereditary traits, while in many points common, are in some dissimilar; depending upon the nature of the protoplasm which has gone most largely into the make-up of the community. Thus the Jukes were characterized by a large proportion of criminals, the Ishmaelites of Indiana by paupers, the "Zero" family of Jörger (1908) by vagrants, the family described by Poellmann by prostitutes and procurers, the Nams, as we shall see, by alcoholism and lack of ambition. The rural communities of "degenerates" usually have this in common: an unusual lack of industry, retardation in school work, and a failure to observe the conventionalities in sex-relationships. There is reason for concluding that the first and second traits are hereditary and are, in a measure, the raison d'être of the foundation of such communities. The last may be, in large measure, due to the remoteness of the community from social influences.

A word about the spirit that has guided the descriptive part of this work. It has seemed to us necessary to analyze as far as possible the fundamental traits of character of these people. We have fallen far short of our ideal in this respect, and yet we believe our personal histories exceed in fullness and analysis any that have been printed heretofore. In the studies that are to be made in the future under the direction of the Eugenics Record Office there will be sought, above all, a more careful analysis of individual traits, with the aim of determining which of them have an hereditary basis.

The share taken by the joint authors in the preparation of this report is as follows: Dr. Estabrook furnished a description of each of the individuals considered, wrote most of Sections 2 and 19d, and arranged the larger charts. The smaller charts were prepared by Mr. W. F. Blades. Otherwise responsibility for the book rests upon Dr. Davenport.

Acknowledgment is gratefully made of financial assistance from Mr. John D. Rockefeller in the publication of the work.

[1] A fictitious name.

[2] This term was first employed, so far as we know, by Dr. E. E. Southard, 1912.

2. Early History of the Nam Family

In 1760 there lived in the mountains of western Massachusetts, a set of people called Nam, descended from the union of a roving Dutchman, who had wandered there from the Hudson Valley, and an Indian princess. These people were wealthy in land, having inherited it from their Indian ancestor. They were spoken of in an old history as "vagabonds, half farmers, half fishermen and hunters, and who, on their occasional visits to the settlements, were apt to fall into temptation and rum." Among these people, was one named Joseph Nam, who had eight children. Five of these eight children left Massachusetts about 1800, and migrated to New York State. Their departure was due to land troubles and petty quarrels with their neighbors. One of these five bought a farm of 160 acres at the place marked N. H. (see Chart D), and that immediate region is still called, "Nam Hollow," as his descendants are still living on, or near, the original tract of land. Another of the five settled at S., a most unproductive part of the mountains. The others were nomads, and moved as they listed, here and there; but the majority finally settled near Nam Hollow.

As time went on, some, who were industrious, prospered. The descendants of these count among their members many prominent men in the communities nearby. The majority, however, were ignorant, unintelligent, indolent, and alcoholic, and did not improve their circumstances. These were mainly farm laborers or wood-choppers, and as they worked only when the mood o'ertook them, they remained poor. Their children did not attend school, and thereby grew up more ignorant than their parents, and in an environment where intemperance and harlotry were the leading evils. These became more and more separated from the better class of people living in the valleys, while the unproductiveness of their land among the rocky hills aided in their isolation.

As one drives through Nam Hollow, he finds a settlement of ten huts and hovels, and the burnt ruins of three more. Four of these can boast of clapboards and shingles, although the last coat of paint was applied many years ago. One has a slate roof. The other six are only one story in height, a few have wooden floors, the rest are built upon the bare ground. The window panes are stuffed with rags in winter to retain the smoky heat of the one stove. The beds are, in general, piles of old rags and worn-out blankets. Means of sanitation are entirely unknown. Whole families live in one room. In one place, during the winter months, thirty-two people of both sexes slept together in one room. Such conditions as these can lead only to illegitimacy, inbreeding, and their attending evils of pauperism and dulness.

Still other Nams live in a collection of six hovels near B., of the same kind and description. Driving on three miles to G., one finds a collection of hovels situated on a rocky and barren hill, and occupied by a group of degenerates all descended from the same person. (See Chart B, Generation I 3.) This group, members of which have married into the Nam family many times, is also characterized by pauperism and harlotry. Another group of people, who throw light on the mental and physical characteristics of the Nam family, is living in the region around K. and M., and in the mountains near

L. These people, whose ancestors' collaterals married into the Nam family, were in general industrious and more intelligent than the Nams, and although they lived in the same kind of physical environment, were not as poor or licentious.

3. First and Second Generations

Our history starts with two pairs of parents, that are, so far as known, unrelated; but the history of whose descendants is strongly interwoven.

Generation I 1 (Chart A) is a man who was born about 1740 in the western part of Massachusetts. He was a Revolutionary soldier. In an old history he is spoken of as "one of a set of vagabonds by the name of [Nam] who lived in the mountains." He was the grandson of the Indian princess and the Dutch rover mentioned above. He married; and died about 1830. His wife (I 2) bore him eight children.

The second fountain head consists of a man (I 3, Chart B) born about 1750 in eastern Massachusetts. He married I 4; they moved to G. in New York State, had three children and died there before 1850.

We proceed now to trace the family history of the eight children of I 1 and their immediate descendants as shown on Chart A. The first son, II 2, was born in Massachusetts about 1770; married II 1 and migrated with her to F. in New York State, where they reared five children, progenitors of Line A. He died about 1830, and his widow about 1840, of old age. Concerning II 12 and 13 we have no information.

A second son, II 3, who never married, migrated to New York State about 1800, and died there about 1860. Those who knew him attest that though ignorant he was honest and industrious. A third son, the oldest of all, II 4, was a Revolutionary soldier and received a pension of ninety dollars a year from the federal government, until his death in S. about 1840. By his wife, of whom nothing is known, he had four children (III 8, 9, 11, 13) constituting the beginnings of Line "B." He was ignorant, alcoholic, irascible, and indolent, and was the recipient of outdoor relief.

The next individual on the chart (II 7) is related to I 1 but the actual relation is not known, as indicated by the dotted line on the chart. He had three children, Line "C."

A fifth son, II 9, proved to be honest and self respecting but unambitious. Selling the land in Massachusetts which he had inherited from his ancestors, he and his wife, II 10 (the first to leave Massachusetts for Nam Hollow), emigrated to New York, bought 160 acres of land at the place marked N. H. on the map, and here, in 1810, built a log cabin which was occupied until 1880 and is still standing. This log cabin may justly be called "The Cradle of Nam Hollow," for everyone born in this cabin has been socially inadequate and has helped swell the number of the degenerates who give this place its character. This pioneer died at N. H. in 1846, leaving four children, III 17, 20, 21, 22, the founders of the "D" line.

The sixth son, II 11, was married, emigrated to New York, had two children, and later, after the marriage of his daughter, III 25, of the "E" line, moved westward and is lost to view. The next child is a daughter, II 12, who never married. Of the last son we have no information.

The last daughter, II 14, is said to have been "of a low grade mentally." She married a distant cousin, moved to N. H., reared five children ("F" line) and died in a hovel at N. H. about the year 1830.

The main progenitors of the Nams are thus six migratory persons concerning three of whom little is known. Of the three others one, II 4, was ignorant, alcoholic, irascible, and indolent ("B" line); one honest and self respecting but unambitious ("D" line); and one of low mentality ("F" line).

We may now trace these six lines, their unions with each other, with the Chart B strain, and with outside strains.

4. Line A

Although we know nothing directly of the characteristics of the parents of this line,
III 2. the history of the children will throw some light upon them. The eldest son, III 2, born about 1790, clearly showed unsocial traits. He was lazy, unambitious, and ignorant; a hunter and fisherman. He lived in the hills of H.,[1] and cohabited there with a woman of English birth, who was slow in movement and as unambitious as himself. By him she had two children, IV 1 and 1a. Before her relations with this man she had had children by another. She lived in F. and died there in 1895, in her 89th year, and
III 3. 33 years after the death of her consort. He had a sister, III 3, who was a harlot. She had a child, IV 3 (who died at eighteen years) by a distant cousin, an illegitimate son of II 26 (Chart C) by a woman who was herself illegitimate and of little intelligence. Sex control was absent from her son also, for he was father of another child, VI 169, by
III 7. another cousin. Another sister, III 7, when very young married her first cousin, from Line B and had nine children. This completes Line A in generation III, except for two males who never married.

IV a. We now pass to the children of III 2. The girl, IV 1, died young. The boy, IV 1a,
IV 1a. who was born at F. in 1836, followed in some degree in the footsteps of his father. He, too, is lazy, slow, and unambitious, a hunter and fisher, and he is prevailingly ill-tempered. He has learned to read and write and is more self-respecting than the average Nam of Nam Hollow. He still lives at H. in a neat hut. He married a girl nine years his junior. She was slow in movements and ignorant although she was industrious and could read and write. She died in 1901 having had eleven children, V 3 to 15.

We must next consider the numerous children of IV 1a derived from the parents described in the last paragraph. We describe them in the order of the chart, which is not
V 3. exactly that of birth. The oldest daughter, V 3, is quick, active, and industrious, but she lacks ambition and can neither read nor write. She lives in very poor circumstances in a hovel near C., has worked in the fields, and now takes in washing. She married an indolent, illiterate, alcoholic vagrant (two of whose sisters had died in early childhood with epilepsy), but he lived with her only a few years and then disappeared, leaving her to care for their three children. Of these children one, VI 1, born at I. in 1896, slow, quiet and unambitious, has had epileptic convulsions since the age of four. She has become mentally enfeebled with respect to memory and otherwise, and has recently left for

[1] Capital letters that designate places refer to the map, Chart D.

the city where she is now a prostitute. A second, born in 1899, is slow, quiet and retarded in school work. He began to have epileptic seizures at three years, and now is very deaf in consequence of a kick by a horse six years ago, which left a depression in the left parietal region of the skull. The third, born in 1904, is slow in movements but doing good school work.

The next two children (V 4 and 5) of IV 1a died at the age of two years of pneumonia. Then follow five sons who were born between 1861 and 1884 and have never married. A is active, industrious, ambitious, and licentious at times, has saved money and owns a farm near H. B is active, industrious, unambitious, and inefficient. He is a farm laborer. C is unambitious and ignorant, is steady as a farm laborer, and has cohabited with a woman in H. D is unambitious and ignorant, but a steady worker as a farm laborer. E is unambitious and illiterate and a steady farm laborer.

V 7. The ninth child, V 7, is slow in movements but a steady worker, and can read and write. She is a harlot and has a tendency to roam.

V 8. The tenth, born in 1864, was industrious, but ignorant, and licentious. She eventually married but had no children. She died in 1910 of tuberculosis.

V 11. The eleventh, V 11, is quick in movements, periodically industrious, ignorant, and lived at B. in poor circumstances, sometimes taking in washing. She is a harlot. She married V 12, who was ignorant, unambitious and indolent, and had by him two children, VI 5 and 6, of whom the first, born 1893, is slow in movements, unambitious, and does irregular and poor work in school, while the second, born 1898, is also slow, unindustrious, bashful, and backward at school. Their mother left her husband, who then disappeared, and she cohabited with various men. She has recently had an illegitimate child by an extremely licentious, unindustrious, alcoholic, but well educated man, who abandoned his good, chaste wife for a harlot.

V 13. The twelfth child of IV 1a, V 13, is an indolent, unambitious, ignorant harlot who married an industrious but illiterate husband, and has by him three children, all under five years, the youngest dying in infancy of pneumonia.

V 15. The thirteenth and last of the fraternity, V 15, born 1879, is slow, unambitious, illiterate, and periodically industrious. She had a bastard daughter (VI 11), by an industrious, ingenious and skillful but alcoholic and licentious cousin (VI 249) whom she later married. This daughter was a quiet, slow, mentally retarded girl who married her slow, industrious, but unambitious cousin and by him has an infant child. After her first husband's desertion V 15 married an ambitious and industrious but illiterate man, with whom she lives on a small farm in the mountains with her three children who have survived infancy. Of these the thirteen year old son is physically slow, untractable, and mentally at the six year old grade. The eleven year old boy is likewise slow in movements as well as in school work. The other is three years of age. Thus this entire large fraternity and its product is characterized by physical and mental slowness, "feeble-mindedness," and licentiousness.

III 7. We return now to consider the product of the third scion of the "A" line, III 7. This girl married her cousin, III 8, of the "B" line and thus unites the two lines, but

her progeny may, for convenience, be considered here. Her husband, son of the Revolutionary pensioner, was lazy, unambitious, irascible, alcoholic, and illiterate. He had nine children by her, IV 5, 6, 7, 8, 9, 11, 12, 13, 15. He then deserted her for an imbecile woman by whom he had eight children. At present only the first group will be considered. Of this fraternity one, IV 12, died of tuberculosis at the age of twenty-five. Another, IV 13, was adopted outside the family and is lost to view. IV 7 is a lazy, unambitious man who was in jail for 15 days because of alcoholism, spent five years in the different county almshouses, and finally died a paralytic. He will be considered below in connection with his consorts.

IV 15. The oldest son, IV 15, born in 1810 at B. was physically slow and unambitious, alcoholic, and industrious by spurts. He married an active, industrious and chaste woman, IV 14, who bore him seven children, V 45, 46, 47, 48, 51, 52, and 54, and died, in 1857, of tuberculosis. He underwent further degeneration, married his illiterate but industrious cousin, V 101 (who already had an illegitimate child by V 103), lived with her in the lowest conditions, and died in 1868. The strong traits of the mother reappeared in most of the children.

V 46. The oldest girl, V 46, born at N. H. in 1833, was active, industrious and chaste, got some schooling, married an unindustrious, unambitious, inefficient neighbor, IV 71, who, himself slow to grasp ideas, and of a stock that is very weak mentally, had already cohabited with a cousin, and, after very imperfectly rearing his three children, VI 59, 60, 61, died of heart disease in 1898, 33 years later than his wife.

VI 60. Of these children the eldest, born 1863, though fairly capable, is unambitious, illiterate,
VI 59. and alcoholic, a "ne'er do well" who married consanguineously. The youngest, VI 59,
VI 61. lazy, deaf, and mentally enfeebled, is married and lives in F. The remaining child, an ignorant though industrious girl, married IV 228, soon left him, cohabited with her cousin, V 198, and had eight children by him (VI 305–310), besides an illegitimate and now alcoholic and sexually "loose" son, VI 303. After living many years in hovels she died in 1900 of heart disease. Her husband, born in 1864, survives. He is active, industrious, unambitious, irascible, untruthful, dishonest, alcoholic, licentious, and can read and write. At the age of fourteen he married a young girl who was a harlot, separated from her to marry VI 61, and after her death married another cousin, VI 257, with whom he lives, a pauper, in a tenement house in B. Of the eight offspring of his second marriage (*i. e.*, with VI 61) four died in infancy, two of infantile diarrhea, and one of pneumonia. The others show a mixture of social and non-social traits such as the mixture of parental germplasms would lead one to predict.

The eldest son, VI 308, born in 1885, is inactive, slightly ambitious, lacks self control, is slightly intemperate, but on the whole tries to do well and associates little with the Hollow folks. He married a girl from K., VI 411, who was backward in school, a neat house wife, and usually quiet, though at times ill natured and self assertive. They have two infant children.

The second son, born at N. H. in 1885, is slow, unambitious, periodically industrious, alcoholic and licentious. He was in jail four months for intoxication. In 1909 he married, consanguineously, VI 258, a feeble-minded, indolent, reticent girl of B.

The third son is like his brother, illiterate, alcoholic (has been imprisoned for intoxication), and licentious. In 1909 he married a cousin, VI 132, and lives in Nam Hollow.

The daughter, born at N. H. in 1893, is active, fairly orderly, good natured, and can read and write, but she was unable to advance at school. She was a harlot, but in 1911 she married an active but unambitious and mildly intemperate outsider. This completes the descendants of V 46.

V 45. V 45 was industrious and chaste. She married an industrious Civil War pensioner, and died at the age of twenty-eight. Of their children one died in infancy, and one, a son, VI 57, is industrious and makes a living as a stage driver.

V 47. Her brother, V 47, born at N. H. in 1845, is slow, industrious, irascible, alcoholic, and licentious. He lives on a mountain beyond the hollow, and has never married.

V 48. Another brother, V 48, born in 1840, is fairly industrious but inefficient, "did not stand well in the community," has been always poor, and alcoholic. About five years ago he suffered a paralytic shock on the left side of the brain, and is now recovering the use of his right arm. He receives a pension of three hundred and sixty dollars per year as a Civil War Veteran. He married, first, V 464 from A., a harlot who became chaste and industrious after marriage, bearing him several children of whom the son is industrious, somewhat educated but generally disliked; two daughters are industrious and chaste; while a third daughter is an active, irascible morphine user and a clandestine prostitute. After she died he cohabited with his wife's sister, V 463, and then with V 461 (Chart C). This fraternity of sisters has an interesting history. Besides V 464 there were three sisters. The first, V 463, was an unintelligent always wayward harlot, who by a lazy man, IV 69, had three children of whom the daughter was industrious, but one son was a criminal and the other a Nam-like,* feeble-minded sot. The second sister was a harlot who married and moved away. The third sister was also a harlot when young. She married, had four children and died in 1901, of acute nephritis. Of three of the children we know nothing. The fourth, a harness-maker, was industrious, forward, talkative, and opinionated, a religious fanatic, and has, by VI 420, an ambitious, industrious, orderly woman, two young children who are fair in school work, prompt, and orderly. The ancestor of this family in generation IV was an industrious though alcoholic mason, who, after the death of his wife, cohabited with sundry women, and eventually became blind.

V 51. Another brother, V 51, is industrious, ambitious, and effective in business. He has the best qualities of the "A" line, is thrifty, well-to-do, and respected. He changed his family name from Nam to escape the disgrace attached to it. He married a girl from E. who was neat and industrious, and had had some schooling. She was considered chaste, but she had not been faithful to her first husband, for after he went to war she married V 51. They have three children (VI 70, 72, and 73) all active, industrious and chaste. The oldest, VI 70, is an ambitious and successful merchant in D. He married a chaste Massachusetts girl and they have an active, alert seven-year-old son. The

* "Nam-like" means: slow in movements, unindustrious and unambitious; it does not include the trait of alcoholism.

younger son, VI 72, born in 1870, was a school teacher and died in 1894. The daughter was well educated and married a chaste and industrious, but slow and only slightly educated, outsider. They have four children, VII 21 and 22, all quick, alert, prompt, orderly, and good at school work. This branch, then, shows an accumulation of social traits that is chiefly the result of a better selection of consorts.

V 52. The remaining brothers, V 52 and 54, were fairly industrious in their youth. The first, a chaste, somewhat prosperous but alcoholic farmer, went West, married, and has

V 54. nine children—all of the five boys alcoholic. The second had little ambition or effectiveness. He too went West, is alcoholic and has not prospered (page 82).

IV 11. We return now to IV 11, born at N. H. in 1810, an ignorant woman who cohabited with several men. Of these, the first is III 86, of Massachusetts, a lazy, ignorant blood

IV 70. relative, by whom she had three children. The first, a son, IV 70, was killed in the

IV 68. Civil War. The second, a daughter, IV 68, was clearly feeble-minded. She cohabited with various men including her cousin, V 121, who died in prison while a soldier in the Civil War, by whom she had one son, V 198, whom we have met as the consort of VI 61. He later married a cousin, VI 257, an inactive, indolent, careless, disorderly woman, shy in the presence of strangers, who had previously had an illegitimate child by an active but licentious cousin, V 143, and since marriage has had three children

IV 69. who are still young, VI 311, 312. The third, IV 69, was an unambitious, unindustrious, inefficient, ignorant man, who married V 463, an unintelligent, always wayward, harlot who died of apoplexy in her 60th year. They had three children, V 199,

V 200. 200, and 201, of whom the youngest son, born at N. H. in 1877, is a dishonest, vicious, alcoholic libertine and vagrant, who has been in the county jail, once for larceny and

V 201. once for horse stealing. The elder son is slow, indolent, unambitious, alcoholic and licentious, lacks initiative and reasoning power, a pauper arrested often for drunkenness. He married a cousin, VI 250, who is physically slow, deficient in causation and illiterate. They live in squalor supported by the little she earns taking in washing. She had previously married IV 228, but left him for V 201. She had three miscarriages and three sons born between 1885 and 1890. All are industrious, but all alcoholic and licentious. All have been arrested for intoxication but not imprisoned. One married but

V 199. soon left his wife. They live among poor surroundings at I. The only daughter, V 199, born at N. H. in 1872, is industrious and neat. She married V 60, and lives in V.

IV 11. Now, IV 11, after leaving her first consort, went to live with her cousin, III 28, an ambitious man who finally left her and went West, where he died of typhoid fever in

IV 72. 1870. They had five children, IV 72–80. The first daughter, born at N. H. in 1836, was considered mentally deficient. In the early sixties she had, illegitimately (by IV 73, an ignorant but industrious young fellow who went to the war but deserted and disappeared), a daughter, V 204, who was adopted into a good family, and was brought up with social conventions as to dress and actions. But she "was shallow minded and showed little mental grasp," although chaste. She married a second cousin, V 170, a slow, shy, taciturn, suspicious, unambitious, inefficient man, with little reasoning power, illiterate, and an irregular worker. She had nine children, VI 264–268, and died in 1903

of hemorrhage ante partum. The veneer of culture she acquired was not transmitted to her children. The eldest, VI 268, was slow and irregular at work, unambitious, and regarded as chaste. She married a vicious, unambitious, vagrant cousin, V 186, who lives as a pauper in F. They have three little girls of whom the eldest already shows nervousness and retardation in school. The next, V 286, died at one year of diarrhea. The two next girls, VI 264a, are indolent and unambitious. They are in domestic service and also are prostitutes. The next is a boy, VI 265, born in 1895, poor in school, indolent, vicious, uncontrollable, and a vagrant. The next were twin girls, of whom one was strangled to death by food in the larynx at five months, and the other is indolent, shy, and unable to do school work that requires reasoning. Next is a girl of 11, mentally retarded to the grade of a child of eight, and, finally, a girl of ten retarded to the grade of five.

But IV 72 had also an illegitimate child, V 206, by the fairly industrious III 4, himself the illegitimate son of an illegitimate daughter. This child is a fair worker and has some ambition. Though formerly alcoholic and licentious, he has married twice and owns a little place in the mountains outside. His first wife died childless. His second wife, V 207, active, industrious, and neat, was a professional prostitute, and had a bastard child, whose father she afterwards married. After his death she married V 206. They have had five children, of whom the oldest, six years ago, died in infancy of diarrhea.

IV 72 also cohabited with IV 71, a mentally slow, unambitious, unindustrious, inefficient alcoholic, from a family with much feeblemindedness. Their first son, V 202, born in 1875, was slow in movements, cowardly, unambitious, dishonest, alcoholic, licentious, and a vagrant. He has married many times, leaving one wife for another. Their second son, V 203, was indolent, unambitious, ill-natured, and vicious. He has been in jail four times for intoxication, twice for stealing, once for grand larceny, once for rape. He has been in State Prison twice. In fact since the age of fifteen he has spent the greater part of his life in jail, and he is there now. Such is the product of a mentally defective pair.

IV 74. IV 74 was killed in the Civil War, and left no descendants. His brother, IV 76, born in 1838, has a good memory, is active, irascible, stubborn, and thoroughly vicious. Although formerly alcoholic, he has for the last twenty years been temperate and industrious at his trade as mason. He has cataract on both eyes, and, although working as much as his partial blindness will permit, he is poor and receives town aid. He committed incest upon his daughter, V 214, and has been married three times (to IV 75, 77,

IV 75. 78). IV 75 was of illegitimate origin, born in 1833, indolent, irascible, careless, disorderly, and disliked by the neighbors. She has had two illegitimate children: an unambitious lazy son, and a formerly licentious but now chaste woman who married V 61 (page 16). IV 75 had six children (V 211, 212, 214, 215, 217, 219) by IV 76 and died a pauper in 1871 during childbirth. With such a sex-history on both parental germ-plasms we look with forebodings to these children. V 211 died at the age of fourteen years of tuberculosis. V 212 was irascible, lazy, unambitious, committed incest with his sister, V 214, married a low grade woman, lives with her as a pauper in a shack in the mountains

in Vermont, and has five children, of whom the two who have started at school are doing fair work at the age of eleven and ten years. V 214, who has been epileptic since the age of twelve, was the victim of incest. She was at the town farm for two years, then at the Insane Hospital, where she died of epilepsy at the age of seventeen. V 215 was an erotomaniac and harlot, married an industrious, forward, garrulous man, and had two sons who have reached the age of puberty without exhibiting licentious traits. They are quiet and industrious, although slow, and uneducated but trainable. Here the superior blood of the father shows. V 217, born in 1878, is quick, industrious and neat, but an erotomaniac, and a harlot. She has married twice, but has no children. V 219 was adopted when young and reared by good people, but, in spite of training, developed the "characteristics of the blood." He is irascible, indolent, unambitious, and inefficient, but has married well. Thus, the entire fraternity shows highly unsocial traits, and the sex impulse breaks out in uninhibited fierceness.

But we are not yet done with IV 76. He married, second, IV 77, born in 1860, who
IV 78. had one child that died at six months. Finally he married IV 78, born in 1865, indolent, feebleminded, careless, lacking in causation, an erotomaniac. They had three or four children, V 222, 223 (the mother at least was the parent of four), of whom the last was born in the poor-house, where the mother and her four children have been continuously since 1893, excepting two who were discharged in 1905. The total cost to society for maintaining these five is sixty-three hundred dollars up to the present time. IV 78 will always be an inmate of the poor-house. She has one low-grade feeble-minded brother in a town farm, and another feeble-minded brother in State Prison for committing incest. The father, IV 76, is the better one of the pair, and his sons tend to reach his standard. The first, twenty-one years of age, is a good farm laborer, and saves his money. The second is a farm laborer at O. The third is simple-minded, unable to learn to work, and deficient in causation. The fourth child is a girl, probably illegitimate, who can do house-work but "cannot be depended upon." Since 1893 the town has paid out twelve hundred dollars for the support of this one feeble-minded child. Thus ends the history of this social unit, IV 76.

IV 79. The remainder of the fraternity will not detain us long. IV 79, born in 1873, when
IV 80. very young was adopted by wealthy people, and all trace of her is lost. IV 80, born in 1835, was an active industrious woman, licentious in youth, married to an industrious but licentious husband, and died in 1905. She reared a family of four, V 225, 227, 229, 230, who turned out fairly well. All are chaste and industrious. All are unmarried except the youngest, who married an industrious and chaste Welchman and had two children who are active, industrious and did well at school. Here the activity and industry of the parents indicate a strong germ-plasm from which the children have profited.

IV 7. Next we consider IV 7, born at N. H. in 1814, a sluggish, unindustrious, ignorant man, alcoholic and without ambition. He had served time for drunkenness, and as a pauper spent five years in county almshouses, finally dying in 1900 of old age and paralysis. He married, first, IV 29, his first cousin, born in 1828 at E. She is reported as

active, industrious, and chaste. When she died in 1860 she left four children, V 75 and 76, of whom one died in infancy, one removed to Minnesota while young, and the other two are unindustrious, unambitious and alcoholic. One has lived for a period with each of two women, and the other died in 1890 from extreme alcoholism. IV 7 later married his cousin, IV 30, whom we shall meet with again.

IV 9. Next in order comes IV 9, intermittently active, but usually indolent, unambitious, irascible, alcoholic, and cruel to his wives. He lived in poverty and died in 1890 from apoplexy. He first married a cousin, IV 232, born at P. in 1813, spoken of as "an average smart woman for those days." She was industrious and chaste and died in 1847 of tuberculosis, leaving six children, V 21, 23, 25, 28, 33, and 36, of whom three had satisfactory qualities. To account for this good result let us examine the pedigree of IV 232.

IV 232 had a sister, IV 233, living in P., who married an indolent, unambitious, eccentric, decrepit pauper, lived with him in the mountains, and for the last twenty years of her life, 1885–1905, was a town pauper. Their only son was dishonest and alcoholic, was married twice, and, being compelled to leave the country, went to Canada. A brother, IV 235, spoken of as "not bright," married a licentious woman, by whom he had a daughter, born in 1850, who married and went west.

The father of IV 232 was born in 1770 in Massachusetts. While young he was industrious and acquired some property but in later years lost it and finally died dependent upon the town. He was of a peculiar disposition. Little is known about his wife, but after her death he lived with a woman of low mentality and died at the age of ninety. He had a brother who went west, and another who was industrious as a carpenter, although he was illiterate and married III 22 and later III 81, to whom he was cruel. This family shows, accordingly, some strength, although it is descended from the original vagabond, I 1, and the marriage of IV 9 was consanguineous.

V 21. One son, V 21, was industrious, ambitious, orderly, and thrifty but alcoholic. As a Civil War veteran he receives a pension of six hundred dollars per annum and has acquired a comfortable home in Vermont. He married an energetic, industrious, and orderly woman with an uncontrollable temper, and an habitual user of morphine. Their single

V 23. child died in infancy. The next son, V 23, is industrious, ambitious, thrifty, temperate, respected and in comfortable circumstances. He married out of the family, but has no

V 25. children. The next son, V 25, is quick in his movements, but indolent, unambitious, good-natured, conversational, alcoholic, a vagrant, and licentious, having cohabited with various women. He married V 26, an industrious, ignorant Irish woman who took good care of her three children, VI 16–18, but eventually left her husband in his mountain hut and cohabited with other men. One of her sisters also was licentious, but the other chaste and respected. All three children of V 26 turned out fairly well; one went West, and the other two are industrious, ambitious, and considered chaste. The girl married an active, industrious, but irascible and alcoholic man from whom she was divorced on grounds of cruelty. Their two children do good work in school.

V 28. The next son, V 28, born in 1844, at S., is indolent and illiterate, but ambitious. He

receives a pension from the federal government as a Civil War veteran. He deserted his first wife, V 27, and family, went West with V 29, and was later married to her by a Justice of the Peace. The first wife, born in 1847, at Q., was industrious and chaste. She was not illiterate, and supported her three children, VI 20, 23, 24, by dress-making, after her husband had abandoned her. In 1907 she suffered an apoplectic stroke, and her suspicious, excitable traits became exaggerated. Five years later she suffered a second stroke and died. Of the children, VI 20 was active, ambitious, industrious, and chaste, married a woman from Vermont with similar characteristics, and has a six-year old daughter. VI 23 is calm, active, industrious and resourceful, good-natured and chaste. She married a fairly active but physically weak man (two of whose aunts had died of tuberculosis)—a painter by trade. He became a morphine fiend and is now hopelessly insane. Their three children, born in 1900 to 1904, are quick and bright and doing well at school; one is, however, very bashful, has nasal catarrh, and is slightly deaf—a weakness found in the germ-plasm of the father. VI 24 is a good, ambitious citizen, doing well on his farm in Vermont, has an industrious, chaste wife, and six young children, all of whom seem bright and active. On the whole the descendants of V 27 have done fairly well.

The second wife of V 28, namely, V 29, was a member of a degenerate family. She herself was slow and she had a lazy harlot sister. She bore her husband three children, VI 27, 28, 30. These are in striking contrast to the three described in the last paragraph. The son is mentally deficient, chaste, but quite lacking in ambition. He married a similarly slightly defective woman and they have two young children. The elder daughter was "easy-going," untidy but chaste. She married an industrious chaste man, and they have two young children, The younger daughter, VI 30, is lazy, careless and unambitious, but chaste. She married the son, VI 31, of her harlot aunt and alcoholic uncle. They have three young children. The lack of ambition in these children is the direct consequence of V 28's second unfortunate marriage.

V 33. V 36. A brother of V 28, namely, V 33, is a lazy, alcoholic vagrant who lives in a hut in the mountains, and though twice mated has no children. A respectable sister married first a respected, industrious, and chaste man, VI 35, who died at thirty years of age. They had two children, VI 32, both active, honest, and industrious, but both died at the age of twenty years of tuberculosis. Then she married an indolent, licentious, and alcoholic man, and had two children by him, VI 33 and 34. The son was unambitious, indolent, vicious, and alcoholic, but in the daughter the good qualities of the mother were evident, for she was active, neat and chaste, married an honest, industrious, faithful husband, and has some young children. Here again the experiment of a double mating shows the influence of "blood."

IV 10. The second marriage of IV 9 was, like his first, with an industrious and chaste woman of good family. She supported them, when the necessity arose, by her industry at dress-making. She died of pneumonia, having reached the age of eighty-seven, apparently belonging to a stronger stock than the first wife. She had four children, V 38, 39, 41,

V 38. and 42. The eldest was easy-going, without industry or ambition, good-natured, honest,

and mildly intemperate. As a Civil War Veteran he gets a monthly pension of twelve dollars. He married first his cousin, V 145, ignorant and licentious, and had by her four children, VI 198–201. The eldest daughter is active, industrious, orderly, quiet, thrifty, and frank. She married V 366, industrious, formerly alcoholic, and licentious before marriage, one of a number of illegitimate offspring of IV 168 (Chart C), a feeble-minded harlot, deficient in causation, a mother at fourteen. Considering the mother's latent defects this was an unfit mating. One child died at one month of pneumonia. One is three years old, and one six, the latter being a coward and shy before strangers. The three older children are unable to advance at school. The youngest of these at thirteen years is lazy and unambitious. The next has more ambition, industry, and self-respect like his grandmother and mother, but the eldest at twenty-one is slow, indolent, careless, a vagrant, alcoholic and licentious. He married a good woman who immediately left him. VI 199 shows the full weight of the father's unsocial traits. Ignorant and a harlot, she married V 354, an unindustrious, vicious man, half of whose fraternity are like him, and whose mother, V 151, was feeble-minded, and his father ambitious and chaste. She died of nephritis in 1907. Three children were born between 1897 and 1900. All are lazy, unambitious, and incapable of learning at school, even in a special class. VI 200, born in 1876, is industrious, ambitious, chaste, and can read and write. Yet there is "something lacking mentally." He married VI 385 (Chart C), a quiet, industrious, and chaste woman of good parentage. In VI 201, born in 1879, less fortunate traits appear. She is indolent, irascible, and backward at school. She is considered chaste and married VI 202, an industrious, temperate man. They live in a comfortable manner in R. and have one two-year old daughter.

V 39. The second child of IV 9 and IV 10 is V 39 who is slow and plodding, alcoholic, and without ambition. He married his energetic but licentious cousin, VI 112, born in 1870, who has left him from time to time for prostitution. They now live in R. in poor circumstances. Four of their children died in infancy of diarrhea or pneumonia. Two sons, considered chaste, differ much in mentality. A daughter, VI 39, is lazy, careless, and illiterate, and a professional prostitute. She has one cross, stubborn, shy three-year old son by a lazy, unambitious husband who still continues his licentious actions.

V 41. V 41, born in 1860, at S., is active, ambitious, industrious, slightly alcoholic, chaste and developing tuberculosis while working at his trade as machinist. He married V 40, an industrious but alcoholic woman. They have five children, VI 41, 44, 46, 48, 49. The first girl was industrious and chaste, but died childless. The second is an active, ambitious, prosperous, and chaste man who married an industrious, honest and chaste woman and has two young children. The third is a thrifty and chaste woman, who married a lazy, vicious and licentious man but soon left him. The fourth and fifth were also socially satisfactory. The fraternity seems to be a fairly strong one.

V 42. Finally V 42 is an active, orderly, chaste woman with some education, who married V 43, born in 1856, an indolent alcoholic, who has deserted her after she has borne him nine children, VI 50–54. The children differ greatly. The eldest son has good habits and is successful in business. The next is an unambitious wood-chopper. The next, a

girl, is a progressive school teacher, but nervous and eccentric. Then come in order an indolent, alcoholic, licentious son; a bright, good girl who died after an operation for appendicitis; an indolent and sickly boy; a fairly industrious girl; and an idle, nervous, alcoholic young man. One sees how complex is the fabric of characteristics.

IV 6. Returning to the fourth generation we consider next IV 6, an ignorant harlot who married her shiftless, feeble-minded cousin, III 31, born in 1820 and the recipient of out-door aid. They had three children, IV 85, 87, 88, who were very unlike. The daughter, IV 87, was industrious and chaste; one of the sons, IV 88, was unindustrious and alcoholic; and the other was industrious, thrifty and chaste.

IV 84. The thrifty son married a bright, active, industrious, but ill-tempered harlot, IV 84, had three children by her, V 248, 249, 251, and died in 1908 of sarcoma of the jaw. All the children were industrious and ambitious. The first was a chaste woman who married a man, V 247, of loose habits in youth, but leading now an exemplary life. Their oldest daughter, VI 338, has good habits; the other two are still young. V 251 cohabited with a prostitute, V 252, and subsequently married her.

IV 87. The industrious, chaste woman, IV 87, married IV 86, born 1840, an active, industrious man, a veteran of the Civil War. They had three children, V 253, 255, 258, born in Vermont, all industrious and chaste. V 253 is a man of some ambition, "does odd jobs," married V 254, a good woman and has two bright, tractable children. V 255 married an active, industrious, chaste but mildly intemperate man, and has four fine, industrious and neat children. V 258 married an industrious, chaste, well-educated, highly respected man, and has two active, industrious, neat and chaste children.

IV 88. The unindustrious and alcoholic member of our main fraternity, IV 88, married a woman of whom little is known, born about 1830. They had two daughters, both harlots.

III 30. Finally, we find that the harlot, IV 6, married as her second husband a man, III 30, who died of Bright's disease about 1870. They had one daughter, IV 83, an unambitious, vagrant woman, who had nine children by a Nam-like man, member of a degenerate family in P., who hung himself in 1909. These children (V 232, 234, 235, 236a, 236b, 238, 240, 242, 245) exhibit a greatly varied combination of traits. About half are industrious and the others not. About half are licentious and the others chaste. Two have a roving disposition. V 232 is ambitious, industrious, a moderate drinker, occasionally licentious, fairly thrifty, of a roving disposition, is married and has an infant. V 234 is a farm laborer with a love of roving. V 235, born in 1891, is physically quick and industrious, and does average work in the third grade in school. V 236a was poor at school, is a domestic servant and licentious. V 236b is sluggish, lazy, retarded at school; forward, talkative, and licentious. V 238 is industrious and chaste, is married and has an infant child. V 240 is quick, unambitious, forward and talkative. She was formerly a prostitute in several houses of assignation in N. and other places. She was married once, and then cohabited with V 239, an indolent, inefficient man, and had two children, of whom one, born in 1907, is playful and active, the other, born in 1901, is poor at school and irascible. V 242 is active, industrious, irascible, and chaste; and of her children by V 243, an unreliable alcoholic, one was born with spina bifida, one died at nine months

of diarrhea, and three others are still young. V 245 is an industrious harlot, who is married and has an infant child by her first husband, now dead. She later married V 246, while he was intoxicated, and lives with him.

IV 8. Returning to Generation IV we find remaining IV 8, a bright, chaste woman who married III 27 (born in 1800 at N. H., an alcoholic depauperate cousin) and had by him a lazy ineffective son who died of small-pox at the age of thirty years.

This line is too complex to sum up briefly. Outmatings tend to produce a variable progeny like that of V 3, IV 87, IV 9, V 41. The defect that is responsible for epilepsy is probably in the Nam strain (see IV 75, 76) and so it appears after a marriage with another epileptic strain, as at V 3. All of the criminals are descendants of III 8, and are mostly among the descendants of the first cousin matings, IV 11 and III 28, and their consorts. Some fraternities, like that of IV 87, are chaste; others, like that of V 75, show much sex-promiscuity. The introduction of the germ-plasm of IV 14, with its industry and chastity, made possible the respectable fraternity which came from V 51 and his wife.

5. Line B

We start with the descendants of II 4, the old Revolutionary soldier and his unknown wife. They had four children, III 8, 9, 11, and 13. About III 9 nothing is known except that she married.

III 8. III 8 has already been described under Line A as the husband of III 7 and the father of her children which showed, in general, slowness of movement, alcoholism, and lack of ambition. III 8 is himself, it may be remembered, lazy, unambitious, irascible, and

III 38. alcoholic. His second wife was III 38, born about 1800 at G. She was a harlot, was without ambition, and was epileptic. Before she married III 8 she had an illegitimate male child, IV 12, who subsequently became the sire of an illegitimate child. By III 8 she had eight children. They lived in a hut in the woods near N. H., and received occasional outdoor aid. She was admitted to the county house in 1879, where she died in 1882. Her fraternity gives an instructive picture. An unambitious and alcoholic brother had "spells in which he acted queer." Another brother was ingenious and industrious, alert and polite. A sister was a hypochondriac and became a pauper. The mother of all these, II 15, was regarded as "crazy," and the father was indolent, unambitious, inefficient, and a pauper. Such is the blood of the mother's side of the house.

IV 16. There were eight children, IV 16, 19, 21, 22, 24a, b, c, and 25, and thirty-one grandchildren from this mating. IV 16 was industrious at times but unambitious and alcoholic, "could not seem to get along," went West, married, and has eight children in

IV 19. Minnesota—six of them shiftless and alcoholic boys. IV 19, born about 1840, was industrious but unambitious, a "ne'er-do-well," who married, went West and has seven children in Minnesota of whom the five sons, at least, are inefficient (page 82).

IV 21. IV 21, born in 1849 at B., is an active, industrious, irascible, violent, and imperious man, without proper ambition, who abuses his wife, has served two terms in jail for drunkenness, and is in poor circumstances. He married IV 20, an active, industrious, irascible girl with some education. She was chaste when young but is now intemperate

and licentious. They have two children. One of these, V 57, born in 1874, is an active, industrious, neat, uneducated woman, who was formerly, even for a few years after her marriage, extremely erotic, but has become chaste. Her husband is an industrious, fairly well educated man who retains his licentious traits after marriage. The home conditions are comfortable. Of their four children two died young, one is two years old, and one, now four years old, has had epileptic fits for two years.

Their other child, V 59, born in 1872, is an indolent, unambitious, alcoholic, illiterate man, naturally quick in movements, and a good worker when so inclined. He first married V 217, and they were divorced on statutory grounds. He served a jail term in 1904 for breach of the peace, and was arrested in 1905 for adultery but the case was not pressed. He is now "married" to V 60, the co-respondent in the divorce case, but is childless. Sex offenses and epilepsy reappear in this branch.

IV 22. A sister to IV 21, IV 22, born in 1847 at B., established a more extensive branch. She was considered chaste and moderately intelligent; eventually died of typhoid pneumonia. She married a lazy, unambitious man, IV 23, who ran up bad debts, and was killed in a boiler explosion in 1892. They had nine children, V 61, 62, 64, 65, 67, and 69a, b, c, d.

V 61. The first is slow, unambitious, and without initiative, but he is industrious. He keeps a country store at C. He married V 210 (an illegitimate daughter of IV 75), who was licentious before marriage and, with her mother, formerly recipients of town aid. They have a son (recently married) in whom are the characteristic Nam traits of slowness and lack of ambition, combined with conceit and musical ability, probably through the germ-plasm of the maternal grandparent, IV 75.

V 62. V 62 is indolent, unambitious, and illiterate. He works as a farm laborer, and lives in the poorest conditions in a mountain shack. He has cohabited with many women. By V 63, who was as lazy and shiftless as himself, he had a lazy and licentious son who could not learn at school and works occasionally as a wood-chopper. He had also a lazy daughter, who is an alcoholic harlot, and could not learn at school. Thus both children are "feeble-minded."

V 64. V 64 is of the same sort as his brothers,—lazy, shiftless, and alcoholic. He has cohabited with many women. One of these is V 455, by whom he had three children, VI 84, 85, and 86. This woman, V 455, introduces a new blood. She is lazy, disorderly, peevish, restless, a harlot who has had children by various men. There are four others, all women, in her fraternity. Let us examine them in detail.

[*The fraternity of V 455.* One sister, V 451, is industrious and chaste, married a fine husband and had an active, ambitious, and studious son who unfortunately died, at the age of twenty, of pneumonia. A second sister, V 453, is slow-moving and uneducated, is a neat house-keeper, talkative, and pleasant. She was a harlot before her marriage to her unambitious, ineffective, and ignorant husband by whom she has had six children, VI 401–406. Two died at the ages of eight and twelve respectively, both of bloody dysentery. VI 402 is industrious but without ambition, imperious, and ill-natured. She married and dominates a slow, careful, plodding farm

laborer, and has by him five children still young. Another sister, V 457, was lazy, careless, and licentious. She married V 458 and had a daughter by him, but left him and has since cohabited with many men. Her husband belonged to a stock far superior to her own. He is industrious though slow, quiet, and chaste. He had a well-educated, active, orderly sister, who by an industrious, chaste, though mildly intemperate consort had two industrious, chaste sons. A brother of his, V 462, was industrious, but a sickly and indigent farm-laborer, who married V 461, a lazy, shiftless harlot, sister to V 457. They had seven children, VI 411–416. One died in infancy of cholera infantum; two others died young. All of the remaining four were retarded or incapable of advancing at school. The two youngest are slow in movement; the eldest has "spells," becoming ill-tempered and deteriorated. She is licentious, and has had three children by an equally licentious, irascible, vicious, inefficient man, V 413.] By the union of such germ-plasms, that which comes through V 64, and that which comes through 455, we have, then, the three children as stated.

VI 84, born in 1890, is slow, indolent, forward, talkative, alcoholic, disorderly, illiterate, and licentious, now cohabiting with an old man in C. VI 85, born in 1895, is a girl, slow, indolent, careless, shy, reticent, and illiterate. VI 86 is a slow, indolent, unambitious, and licentious boy, with an inane, leering expression. He was sent to the State Industrial School for Boys in June, 1906, on a charge of burglary in the third degree and petit larceny. He is now out on parole at C. It will be observed that the union of these two parents whose germ-plasms are very deeply defective socially has resulted only in social defectives.

But V 64 has had children by his cousin, VI 287, also. This girl is indolent, careless, disorderly, irascible, boisterous, forward, licentious, and alcoholic. She has cohabited with several men and at one time was married to her uncle, V 163, who is slow, indolent, licentious, and alcoholic. By this uncle she had a daughter who is now, at the age of sixteen, a prostitute. She had also an illegitimate daughter, now thirteen, who is irascible, stubborn, and backward at school, a candidate for the same class as her half-sister. The surviving offspring of V 64's second experiment in heredity are still young, six and three years respectively. But already they show signs of the future—reticence, taciturnity, the mouth held open although without adenoids.

V 65. We pass now to V 65 who resembles his brother but is superior, for he drinks less, works more steadily, and lives on a farm near V. He married V 66 of the slow, unambitious, disorderly type, who was already with child by him. The six children are all slow physically and indolent. The eldest, a girl of 16, did fair work in school and is considered chaste. She works in a store at E. The next girl did fairly well at school. The next, nine years old, is not docile. The eldest boy is feeble in his grasp of facts. The one next older than the baby is tongue-tied.

V 67. V *67 is of a decidedly higher type than his brothers, for he is industrious, orderly, and has some ambition and success. He married a chaste woman and has two sons who, now past the age of puberty, prove to be active and industrious.

Leaving aside IV 24, three children who died young, there remains to be described

the woman, IV 25, born at C. in 1840, and her progeny. She is much lower in instincts than her sister, IV 22. She was a harlot with a wandering impulse that led her to tramp the roads. Entirely illiterate, after a somewhat complex history of sex relations, she entered the County House in 1879, there had a baby of whose father nothing is known, remained until 1881, returned on two other occasions, and was buried by the town in 1905. By IV 26, a lazy, licentious man who has since disappeared, she had a
V 73. miscarriage, and two children. The son, V 73, was lazy, licentious, vicious, and alcoholic. He served a term in State Prison for arson, and a term for threatening to kill. By a vicious harlot, V 355, now living in the mountains of Vermont (half of whose sibs are licentious and vicious) he has three children, all slow and poor in school work. The eldest son (seventeen) is showing his father's vicious traits.

V 72. The daughter, V 72, is fairly quick in movements, but indolent and unambitious, cannot tell her own age, and is completely illiterate—an imbecile. She has been in the county poor house where one child was born, and has received much out-door aid. She now lives in poor condition in a shack near C. By three fathers she has had in all fifteen children, including two miscarriages, four deaths soon after birth, and nine still living. By V 71, a lazy alcoholic negro, she had two mulatto sons, both of whom were in the orphan asylum for a while during childhood. This sojourn did not change their nature: the elder one remains at C. unable to learn, lazy, licentious, and alcoholic; the younger one, who had developed vicious traits, ran away at the age of fourteen, and has not been heard from since. They had a mulatto sister, burned to death in a brush fire. By V 470, born in 1841, a sedentary, indolent, unambitious, careless, impractical, disorderly, talkative, illiterate man with bestial tendencies, a Civil War veteran who receives an annual pension of one hundred and forty-four dollars, V 72 had eleven children including two miscarriages and two infant deaths. The eldest girl is a feeble-minded harlot with a slow stubborn child of three years. The next girl, seventeen years of age, is likewise lazy and feeble-minded, and is married. Four of the others are slow and retarded in school work or unable to learn, but one sixteen-year old son is fairly active at farm work. One is hydrocephalic. All will, doubtless, soon be reproducing their kind unless society does its duty.

III 11. We have next to consider III 11 and his descendants. He was born in Massachusetts about 1780, and we know little of him except that he, too, was lazy and ineffective, deficient in causation, the recipient of much town aid. He lived in N. H. and died in 1850 of old age. His wife, II 17, had by him eight children, then she deserted him to cohabit with another. She had an indolent pauper brother (whom we have met as the husband of II 15) and a harlot sister who had by an ineffective pauper three harlot daughters, III 46, 49, 50, of whom we will speak more later. Of the eight children, six went
IV 29. West and are lost to view. IV 29, born in 1829, is reported to have been active, industrious and chaste. She had by her cousin, the lazy, unambitious, alcoholic pauper we have met before, two children of whom something is known—both being alcoholic and
IV 30. probably unambitious. The sister, IV 30, who is reported to be active, industrious, and chaste and much superior to her environment, married IV 31, of whom nothing is

known, and had two children, V 78, 79. V 78 is in Michigan, and V 79, a chaste woman, died at the age of thirty-five, having married an indolent, unambitious, licentious man by whom she had a daughter and a son. Both are licentious like the father. The former, VI 112, is active and resourceful, and intermittently a prostitute. The latter is indolent, unambitious, and a cripple.

IV 30 had, moreover, by a slow, quiet, unambitious, and illiterate basket-maker, two boys, V 81, 82. The former, born in 1841 in Vermont, was an indolent, unambitious, disorderly basket-maker, like his father, a pauper, and in his youth licentious. He married an alert ambitious girl, IV 136, who, always faithful to him, has become slack, slovenly and listless. She lives in a shack in the hills near R. and has three children. Of these the young daughter is a slow moving, lazy prostitute who makes her home in her father's hovel. The two sons are slow and industrious, unambitious, alcoholic, licentious and illiterate. The younger served a term in State Prison for stealing (while intoxicated). The other boy though irascible is much more ambitious and industrious than his brother. He married his cousin, V 83, and lives on a farm in Vermont, where they have a bright, industrious son.

Finally, we must consider the numerous descendants of III 13, born about 1800. We know that she was unambitious, alcoholic, ignorant, and doubtless mentally deficient. Cohabiting with III 12, of whom we know nothing, she had a daughter, IV 34, who disappeared, and a son, IV 35, of the Nam type who after much licentious behavior also disappeared. III 13 next married III 14, of Line "C," an incapable, who served a term in State Prison for breaking into a store. He was a pauper, lived in a hovel, and died of old age at about seventy years. His father, II 7, was related to I 1, but the relationship is not known. He had three children, IV 37, 38, and 39, who are described under Line "C."

In this line so many out-marriages have occurred that new traits have been brought in such as music, conceit, and the ambition to go west, and in these outcrosses many weaknesses disappear in the children. The nervous disorders that are striking in the germ-plasm of III 38 reappear as abusiveness in IV 21, epilepsy in VI 76, garrulousness in VI 84, and criminality in the descendants of IV 25.

6. Line C

From II 6 were derived two sons and a daughter, III 14, 15, and 19. One son, poor and incapable, broke into a store at F. for which he served a term in State Prison. The next was an indigent woodsman, and the daughter, III 19, was chaste, self-esteeming, civil and neat. She died in 1865 of old age.

III 14. III 14 married III 13, the unambitious, alcoholic, and doubtless mentally deficient woman with whom we have already become acquainted in Line B. They had three

IV 37. children, IV 37, 38, 39. Of these, IV 37 was lazy and alcoholic. He got a pension as an ex-soldier in the Civil War, was a pauper receiving out-door aid, and died of cerebral hemorrhage. He married IV 36, licentious in youth and alcoholic, who bore him eight children, V 84, 85, 86, 87, 88, 89, 90, and 91, all of Nam Hollow.

V 84. The first was a suspicious, causationless, alcoholic harlot who married a slow, quiet, unambitious, honest, chaste, illiterate cousin, V 152. He was a man equipped with a good memory, but of no initiative or reasoning power, a pauper living in a shack in Nam Hollow. He was derived from an honest father and a slattern woman of low stock. The progeny, which will be described in Line E, were all typical Nams, indolent and unable to learn at school, the men alcoholic, and the women harlots.

V 85. The next was an indolent, alcoholic, inefficient, illiterate man who lived in N. H. successively with two women, had three children and died in 1903 of dropsy. By VI 423, a harlot who died of tuberculosis in 1893, he had two children, VI 119 and 120, of whom the latter died young. Their mother's fraternity, of Canadian origin, was not without mechanical ability, but full of licentiousness. She herself had previously had two illegitimate children, both sluggish, lazy, slovenly harlots, incapable of school work. Her brother, VI 422, is quick, industrious, prompt, dishonest in word and deed, alcoholic, licentious, capable of reading and writing and possessed of some mechanical ability. By the Nam-like VI 133 he has the numerous and mostly unsocial progeny described under Line C. A sister, VI 424, is an ignorant harlot who had relations with V 109 of Line D. It was a lazy disorderly talkative uncle (V 470) of this fraternity who married V 72 (Line B). The son, VI 119, though licentious, showed the influence of the outside blood in his ambition, temperance, and pride in his personal appearance. The other woman, a cousin, VI 224, was incapable of learning, indolent, alcoholic and a harlot. She was in the House of Refuge for women, where her child was born, and in a number of other correctional institutions. She was in various houses of prostitution, and cohabited with an Italian in New York State, where she contracted syphilis, and died in 1908, of pulmonary tuberculosis. She belongs to one of the worst strains of the Nams, which we will consider later. The ten-year old son of this pair, VII 77 has congenital syphilis, and is a stubborn, uncontrollable, mischief-maker, who ran away from the orphan-asylum where he had been placed.

V 86. The next member of the main fraternity, V 86, is an active, industrious, ingenious, somewhat ambitious but alcoholic man, who married his cousin, V 154,—a woman whose sense of causation was absent, who had hysteria, was called "crazy," had received temporary aid during four years, and had lived in the County House almost continuously from 1894 to 1902. She died in 1905 of pleurisy. Her fraternity shows the typical Nam laziness, together with much taciturnity. From this pair came six offspring of which two died soon after birth. The oldest son, VI 121, was lazy, and died of pneumonia at the age of twenty six years. The next, VI 122, was lazy and unambitious, disorderly when intoxicated, and has cohabited with his equally disorderly and alcoholic sister, and has had by her two children who were both destroyed by the mother at birth. There remains a Nam-like alcoholic son, VI 124, who works rather steadily at wood-chopping. He has cohabited for the past seven years with his cousin, VI 173, an active, forward, talkative, but mentally retarded girl, with complex sex relations. Of their four children, all born in Nam Hollow, one died at six months, and the others, now six, five and three years old respectively, are shy and slow.

V 87. We come now to V 87 with the slow, unambitious quiet traits of most Nams. Although alcoholic he is a good worker and, with the help of his son, VI 130, has recently completed a new house. He married a cousin, V 155 (sister of V 154 described a few lines above), slow, listless, shy, taciturn, unambitious, illiterate, eccentric (like her sister at times), and by her had nine children of whom five died young. The first, VI 127, born in 1879, has some of the best traits of this line,—is active, industrious, neat, and orderly. She has the impulse to do well, and lives in much better circumstances than others in the Hollow. By VI 126, an indolent, unambitious, alcoholic, licentious man, who later deserted her and served a jail term for non-support, she had three children, of whom one girl has the mental and moral traits of her mother. The other girl, aged thirteen, is feeble-minded, licentious, and intemperate, while the eight-year old boy is lagging, careless, always in mischief, and runs away from home. The second of the fraternity, VI 128, is indolent and unambitious, did poorly at school, is mildly intemperate and licentious at times. She married her cousin. The next, VI 129, born in 1887, is a Nam-like, alcoholic, licentious male, a stammerer, and a fitful worker. He has recently married a feeble-minded cousin. Finally, VI 130, is an active, industrious, thrifty, temperate and somewhat chaste young man who owns a pair of horses and helped his father build a house.

V 88. Going back a generation we come next to V 88, born in 1860, who was lazy, and died
V 89. of tuberculosis in 1880. Then comes V 89, a Nam-like male, alcoholic and formerly licentious, married to a cousin, V 112, who is active, industrious, unambitious, and irascible, does house-work and earns all that is brought into the household. She is a harlot, is alcoholic, and lives in poverty in a hovel near A. Of nine children, seven, VI 181a, b, c, d, e, 182, 185, survive. We have now by inbreeding of like defectives reached nearly a uniform type. The six sons are practically all alike in showing the typical Nam traits including alcoholism and, with possibly two exceptions, licentiousness. The only daughter, born 1887, is feeble-minded, has committed incest with her brother, and has an illegitimate daughter five years old, who is slow and bashful.

V 90. Next comes V 90, born in 1850, an industrious, ingenious man of irascible temper and considerable mechanical ability, although with little ambition. Always poor, he had eight children by three women and died in 1901 of pneumonia. He first married his cousin, V 164, an indolent, indigent harlot, who died in 1889 of uterine hemorrhage. She belongs to a large fraternity of Line E, of whom the majority are slow, unindustrious, and licentious, although there are striking exceptions. Of their four children the first is slow, deficient in causation, illiterate, and lives in poverty and squalor, taking in washing for a living. She married IV 228, but soon left him to marry her cousin, V 201, a feeble-minded licentious drunkard of a licentious strain. She had three miscarriages and three sons, born between 1885 and 1890, all unambitious, alcoholic and licentious, and all living in poverty at I.

The next child is VI 249. From his father (or from both sides of the house) he gets industry, ingeniousness, and mechanical ability. His marital relations are complicated. He married his cousin, V 15 (as described on page 5), to legitimatize her feeble-minded

daughter, then left her and married VI 248, by whom he had four children, VII 85 and 87, then abandoned her and went to the western part of the state, and then cohabited with his step-mother, V 165, and had an illegitimate child by her in 1911. His principal wife, VI 248, was active, busy, orderly, neat, good-natured, neither loquacious nor taciturn, but a harlot. Besides VI 249, she has lived with VI 303 and has also had an illegitimate child, is now tubercular and lives in a rural section of New York.* Of their four children, three died in infancy of alimentary diseases. The thirteen-year old son is doing fair work in school, is taciturn and unambitious; his sex instincts have not yet broken into flame.

VI 251 also has mechanical ability, but lacks training. He is quiet, shy, taciturn, and licentious. He works on a farm in B. VI 252 is an industrious girl and fairly capable in house-work. At the age of sixteen, she married VI 253 and has had eight children of whom five died in infancy, and two are feeble-minded. The other is still an infant.

V 91. Finally, V 91, is a steady but unambitious worker, a Civil War veteran who was always poor. He married a cousin, V 92, and died in 1891 of cancer of the stomach. She was slow, careless, indifferent, submissive, causationless, without initiative, unambitious, and alcoholic. He had eight children by V 92, and one by V 90, the latter being Nam-like, alcoholic and licentious. V 92 still lives in Nam Hollow on a widow's pension of twelve dollars monthly, assisted by town aid and basket-making. Of the children, VI 139 died at two days and VI 140 died at three weeks. VI 133, born at N. H. in 1870, is slow, lazy, disorderly, alcoholic, entirely lacking in causation, licentious in youth, and deaf. She does washing and basket-making and lives in squalor in a hovel. She married VI 422, a quick, industrious, prompt, dishonest, untruthful, and licentious man, who is careful in his work, but careless in other things. His fraternity carries a history of licentiousness, one of them, VI 423, we have already become acquainted with as the consort of V 85 (page 20). Of their twelve children three died early (two still-born) and two are still young. Of the remaining seven two boys are capable of learning, and are, so far, chaste. Two boys are Nam-like, alcoholic, licentious, feeble-minded, and one of them marries his cousin in 1911. One boy of ten years is an apathetic idiot, can neither talk nor walk, being ataxic. He has had epileptic seizures since he was one year old, and needs institutional care. The older girl, VII 31, is a feeble-minded Nam, has had an illegitimate child, and since had married the father. The younger girl, born at N. H. in 1888, was, when young, adopted and reared by a good family in B. She could not advance at school and is lazy and shiftless but chaste. When away in Vermont where she now lives, married, although childless, she dresses neatly, but when in N. H. she reverts to the old slack and slovenly ways; such is the influence of example and social opinion.

VI 134, born in 1875, is keen, active and industrious, but illiterate and a harlot. She married a cousin, V 158, who is a lawless, vicious, licentious, and alcoholic man. They had two feeble-minded, licentious sons.

VI 135 is indolent, disorderly, deficient in causation, alcoholic, and illiterate. She

* Here, as elsewhere in this memoir, "New York" implies the State outside the limits of our map.

lives in a hovel and makes baskets. She married a cousin, V 146, who is a notorious character. He is indolent, careless, disorderly, dishonest, alcoholic, frequently irascible, a vagrant basket-maker. He was in the penitentiary two months for misdemeanor, and in State Prison four years for assaulting a person with a knife. He is cruel and abusive to wife and children. He was married twice before, and has a licentious sister. His parents were causationless and married consanguineously. The father was an indigent chair-caner, and the mother a "fool" and a harlot. Of the four children the oldest is only eight years. They are slow acting and shy, and the victims of the brutality of their neuropathic parents.

The next member of our main fraternity is VI 136, born in 1878, deficient in causation, vicious, a harlot, who died childless in 1900 of pneumonia. VI 137 was without ambition or causation, and choked to death, at the age of twenty-five, on a piece of meat. VI 138 reacted in the typical Nam fashion, was alcoholic and licentious, and served fifteen days in jail for drunkenness. He had no children. It is noteworthy that both the last two males were so bad that their consorts deserted them, thus diminishing their chance of leaving progeny. Sexual selection is effective even in Nam Hollow!

IV 38. We return now to the fourth generation. IV 38 was a typical slovenly Nam with slowness, laziness, disorder, and lack of industry. She married a cousin, IV 60, by whom she had seven children. By another cousin, IV 50, a mentally weak man, she had a deficient and licentious son. IV 60, born in 1825, though without industry or ambition, was honest and bore a good reputation. He went to the Civil War but deserted and died in 1904 of Bright's disease. His fraternity contains many unsocial traits, and comes from a pair of cousins. They vary greatly, as we shall see when we consider them in Line E.

IV 39. IV 39, born at N. H. in 1816, is of the Nam type and alcoholic. She married consanguineously III 17, a lazy, alcoholic, licentious cousin, who supported his family by gradually selling the farm which he had inherited from his father. He married first III 18 (Line C), and second, after her death, IV 39, degenerating to the lowest conditions. By IV 39 he had five children, V 92, 93, 95, 96, and 97, of whom we have met the first as the feeble-minded consort of V 91. V 93 was an industrious, ambitious and self-respecting man, who married a harlot cousin, V 179, and had four licentious and vicious children, VI 282–287, as described under Line E.

V 95, born in 1852, was licentious and died in the State Insane Asylum in 1895. By a man who is only slightly known she had VI 141, born in 1869, a reticent, chaste, self-respecting woman, who is, however, eccentric, and entertains ideas of grandeur and self importance which are probably paranoic in nature. VI 141 married a cousin, V 167, a resourceful, industrious, ambitious, respected man, and has a surviving daughter, born at C. in 1896, who is fairly good at school, but lazy, untidy, and shy. Let us hope V 167 has brought in strength to counteract the psychopathic tendency in this line.

V 96, born in 1850, was a typical Nam. He married a Nam-like cousin, V 150, and produced a progeny of feeble-minded children described in Line D. V 97 is also a typical alcoholic Nam, who had a child by his alcoholic and licentious cousin, V 157. She was

feeble-minded, alcoholic and a harlot. V 97 married V 98, moved away from N. H. and died in 1890 of pneumonia. His wife was chaste and quiet, but had two lazy weak-minded brothers, an alcoholic father, and a chaste mother. Like her mother's mother she died of cancer in 1905. They had three children, VI 142, 143, and 145, of whom the first died at birth. The next is an active, industrious, ambitious, and chaste man, who married a good wife and is farming in New York. The last is doing fairly well at school. is active, and a church member. V 98 married V 99, who was born in 1873, an industrious and chaste man. They had five children of whom three died in infancy of diarrhea, spinal meningitis, and spasms respectively. One of the other two children is doing average work at school, and the second is retarded and suffers from weak eyes.

Returning to IV 39, we find that she had a child by IV 51, a slow surly, unindustrious cousin. This child, V 100, born in 1861, was an idiot, kept, until her death at twenty-two years, in the County House.

We must now consider the descendants of the second son of the founder of Line C.

III 15. III 15 is the poor woodsman who married a first cousin, III 16, who showed the promiscuous traits of the tribe. They had one child, IV 40, who died at sixteen years of measles.

III 19. We pass to the descendants of the chaste daughter, III 19. She married a cousin, III 20, a "poor but honest" and industrious man who died in 1865. They have seven children,

IV 45. IV 45, 48, 50, 51, 53, 55, and 55a. The descendants of these two good people of bad blood are rather instructive. Four are, on the whole, good, and three bad. Thus IV 45, though ingenious, was unindustrious, unsuccessful, and always poor. By IV 168, a causationless harlot, a mother at fourteen, and belonging to a fraternity of harlots, he had three children, V 113, 115, and 118. These girls were all harlots and vicious. By IV 169, an inefficient and vicious alcoholic, in jail for breach of peace, V 113 had an indolent, vicious, licentious daughter, V 186. V 115 is irascible, illiterate, and has external strabismus of the left eye. By V 116, an unambitious, industrious, licentious, alcoholic man, she had four children, two poor at school work and one fairly good. V 118 has become industrious and chaste since her marriage to V 117. The latter is a brother to V 116, but is industrious and has some ambition. All three children are industrious, ambitious, and chaste, but do poor work at school. IV 45 had by IV 46 a daughter of good repute.

IV 48. IV 48, an active, quick, ingenious, and chaste woman married IV 47 and went West.

IV 51. They had a son who is reported as "doing well." IV 51 is slow, surly, and unindustrious. By IV 39 he had an idiot daughter.

IV 50. IV 50 is deficient in causation, industrious, but with little ambition. By IV 49, an active and forward harlot, whose mother lived for some years with a negro and had mulatto children, he had five children of whom one died young and two went West. V 121 married his cousin and died in the Civil War. She was a feeble-minded harlot with a lazy brother, and had an active, industrious, but vicious, alcoholic, licentious son, V 198, who married first a fourteen year old harlot, and then VI 61, as already described (page 6), producing offspring of whom three were licentious and one more self-controlled. V 198 next married his cousin VI 257, the indolent unambitious, disorderly, shy harlot

V 183 (page 34) and had children of whom the eldest, at 6 years, is slow. V 124, born in 1855, was ambitious and chaste, married and went West.

IV 53. IV 53 is, like his brother, gruff and surly, but industrious, temperate, thrifty, and, in later life, religious. By IV 52, an industrious, chaste woman, he had two good IV 55. daughters, of whom one at least married well and both have moved away. IV 55 is active, effective in business, surly, and chaste. He was cruel to his wife, III 54, the mother of his ten children, V 129, 131, 133, 135, 136, 137, 139, 140, 142, 143. She was a neat industrious, chaste naturally self-respecting woman, most of whose fraternity was good, but who had one boisterous, profane sister. Of the ten children two died young. None of the others resemble the Nams. All are active, and industrious, and, with the exception of V 143, always chaste. V 131, born at N. H. in 1845, is keen and ambitious, left his birthplace when young, has gained riches, is proud, and holds himself above his kin. The prosperous farmer, V 129, married a good wife, V 130, and has five industrious and chaste children, all living in Vermont. The industrious, ambitious, chaste, V 137, married an industrious, chaste man; of their two children the daughter, VI 94, born at E., who alone survived infancy, is chaste and well educated. The careful, ambitious, chaste, successful business-man, V 139, born in Vermont in 1858, married a quiet, methodical woman, V 496, who is a victim of manic depressive insanity, like her father, who married his first cousin, her father's father (who had delusional insanity), and her mother's sister who was said to be "queer" and "peculiar." Their two daughters, eleven and twelve years, are bright scholars, active, and orderly. V 140 married a good man, V 141, and has two industrious, neat, and chaste daughters, born in N. about 1890.

This line is characterized above all by the great amount of consanguineous marriage. The result is a great uniformity of traits in certain branches, especially slowness, lack of industry and ambition, alcoholism and a great amount of licentiousness; these are the typical "Nam" traits. In certain fraternities of this line there is considerable ingenuity. Certain marriages into better outside blood have produced socially fit progeny.

7. Line D

Through the original Nam and his self-respecting but unambitious son, II 9 (who settled Nam Hollow), and the latter's unknown wife came four children, the founders of III 17. the branches of the D Line, III 17, 20, 21, and 22. The first is a lazy, unproductive, unambitious, alcoholic man, who inherited his father's farm and supported his family by gradually selling the property. He married, first, III 18, born at D. about 1800, a chaste, self-respecting woman by whom he had two children, IV 41, 44. One of them received a common school education, was chaste, married and had a child who died young. The other, born at N. H. about 1820, had a common school education and became a church member. She was orderly and chaste, but degenerated after marrying her lazy, shiftless, alcoholic, licentious, illiterate, depauperate husband, and became slow, disorderly, and indifferent to self and circumstance. Environment plays a part here, but she must have been lacking to have married such a man. She had seven children, V 101, 105, 106, 108,

109, 110, 112, most of whom have grown up and exhibit the typical Nam traits. Thus V 101 was industrious but licentious. By an alcoholic man, with whom she lived as house-keeper, she had an illegitimate daughter, VI 161, a typical Nam, who has lived a wild sexual life and has a dishonest, stubborn, licentious, illegitimate son of seventeen years. By an unknown sire V 101 had another illegitimate child, who was of a much better type, and moved away from A. She married IV 15, who is the unambitious, alcoholic son, whose less degenerate offspring from his fairly good wife have already been described; and eventually she died a paralytic, in the County House.

The next daughter (V 105) is deficient in causation, and is promiscuous in her sex-relations. By one ignorant and indolent consort, V 104, she had an industrious but unambitious son, VI 168, who is an indigent farm laborer near A, and who has by the fairly active, chaste woman, VI 167 (of a mostly feeble-minded fraternity, revealing chorea, strabismus, and speech defects), an irritable son of four years and other, younger, children. Another consort of V 105 was III 4, an illegitimate son of an illegitimate mother of little intelligence. From this temporary union proceeded VI 170, an illiterate licentious vagrant now in the United States Army. Still another consort was the lazy, alcoholic IV 37, who fathered an unambitious, industrious girl, whose two illegitimate children were destroyed at birth.

V 106, born at N. H. in 1839, is an unambitious, placid, listless, submissive, unreasoning, illiterate, licentious alcoholic. He is a veteran of the Civil War and receives a pension of thirty dollars monthly, besides town aid. He lived in a hovel, and married a degenerate, V 107, whose one illegitimate and three legitimate children all, fortunately, died young.

V 108 is industrious but alcoholic, wholly illiterate, and licentious. By his brother's wife, V 107, he had a daughter, VI 173, born in 1883, who is active, forward, talkative, but poor in school work, and has left two husbands in six months.

V 109 is a "typical Nam," alcoholic, licentious, and a recipient of town aid. He gets a pension of twelve dollars per month and was in the County House in 1897 for three weeks because of illness and destitution. He married IV 158, an indolent harlot, who later left her husband and went to live with the Indians near L. She was derived from I 3 and I 4, and belongs to a feeble-minded cousinhood and has a licentious parentage. Of their three children one has gone West and two indolent boys remain, one licentious, and the other alcoholic. The latter has cohabited with an illiterate girl, V 308, who, first becoming a mother at 14, has had a complex history. He had by her a child which died.

V 110, born at N. H. in 1845, is without reasoning power, physically slow, occasionally industrious, and steadily alcoholic. He now lives alone in a dugout. By V 111, an ignorant harlot with only one arm, who died in 1898 of cancer, he had two children. The younger daughter is indolent, irascible, and prefers begging to work. She married, first, VI 179, by whom she had three children. These were abandoned by the roadside one day in the winter of 1901, the youngest, a boy, VII 58, born in 1897, being frozen to death. The older one, a girl born in 1895, was placed in an orphan asylum

until 1905, and then put out at service, where she is chaste and doing well, although three years retarded at school. The younger girl (born 1896) was in the Orphan Asylum until 1903, and was then sent to the State Institution for Feeble-minded Children. Her school report for 1911 reads: "Speech imperfect; can add to twenty; reads well in second reader, writes neatly, spells well; does good work in sewing class." VI 178 went to live with IV 144, born at A. in 1862, lazy, without purpose or initiative, talkative, and opinionated, a pauper relying on the town. He lives in a filthy hovel where VI 178 has brought five children into the world. One is six months old, one two years and one four. The eldest girl died at birth and the remaining one is a macrocephalic, slow, boisterous, a sad cripple from a broken leg which was never set.

Finally, V 112 is an industrious, unambitious, irascible alcoholic harlot. By the indolent V 89 she has had nine children all of the Nam type, as described at page 21. Here end the descendants of III 17 and 18.

III 20. The descendants of III 20, who married her cousin, III 19, have been described at the end of Line C. III 21 is indolent, licentious, and criminalistic. He stole horses, broke into a store, and procured women for a house of prostitution. He left Nam Hollow and has never been heard from since.

III 22. We must consider, finally, the descendants of III 22, and her cousin husband, III 80, an industrious carpenter who was abusive to his second wife. By III 22 he had two IV 57. daughters, both neuropathic and licentious. IV 57 was spoken of as "a fool." She married a similarly weak-minded cousin, who caned chairs for a living, and had two children. V 145 was the licentious wife of the easy-going V 38, whose progeny we have already considered in Line A, page 12. V 146 was an indolent, careless, disorderly, lawless, dishonest wanderer, a maker of baskets, incarcerated for years for assault with intent to kill, a man who was cruel to his wife and children. He married V 323, born in Vermont, in 1866 of illegitimate origin, industrious, neat, resourceful, and slightly irascible. By her he had four children, VI 208, 210, 212, 214.

The first of the children of V 323 is V 208, a clearly feeble-minded woman, *i. e.*, slow, disorderly, listless, indifferent. By an unambitious man, VI 207, she had an illegitimate son, VII 70, born in 1906, who is active and neat. By the vicious and alcoholic VI 209 she had two young children of whom the older, born in 1908, cannot talk, and is cross and irritable. The mother is now cohabiting with V 62 in the mountains near S. Her sister, VI 210, is industrious but unambitious. She married VI 217 but divorced him. She had an illegitimate daughter, born in 1904, who is good in school work, active and playful, but shy. She has now married again. VI 212, born at N. H. in 1885, is unindustrious and eccentric, and formerly a harlot. She married VI 213, an industrious and chaste man and has an infant son. VI 214, born in 1883, is slow and indolent. In 1903 she had an illegitimate son, an active boy.

V 146 later married the lazy slattern VI 135, and by her has the slow children referred to on page 23.

IV 58. We return now to the fourth generation. IV 58, born at N. H. in 1820, is deaf, deficient in causation, eccentric, and was regarded as insane. At first a harlot, she

married IV 59, a "simple" man, a root-digger by occupation, who was the recipient of out-door aid, and he and his wife spent their last ten years in the County House. They had three children, V 147, 150, and 151. Despite this bad germ-plasm and equally bad environment, we have V 147 showing himself quiet, self-respecting, ambitious, and industrious, and marrying an ambitious and chaste woman, and begetting five children with fair to good school records. In view of the mother's licentiousness, we may well doubt the paternity of this son, even though the physical Nam traits (of the mother) are striking. The other two children were wholly different. V 150 was indolent, alcoholic, wholly illiterate, and a harlot. By her cousin, V 96, she had six children, VI 221–224, and with him was run into by a railroad train while intoxicated. V 96 was, as we have seen (page 23), a typical Nam.

Their eldest daughter, born in 1885, is an indolent, disorderly, alcoholic, untruthful vagrant and harlot, although not without capacity for house-work. She has served two terms in the county jail, and was twice in the House of Correction for drunkenness and disorderly conduct. She contracted gonorrhea, and married a cousin, VI 138, but does not live with him. Her brother, VI 222, born in 1889, was indolent, vicious, and licentious. He was admitted to the Orphan Asylum in 1897, but ran away in 1902 and returned to Nam Hollow, where he drowned himself in 1908. His brother, VI 222b, was a typical Nam. He injured his head in 1897 in a railway accident, and was in the Orphan Asylum from 1897 to 1902. He has since been placed out by the Children's Aid Society. The youngest child, VI 223, born in 1896, was adopted at two years and her subsequent history is unknown. VI 224, born in 1880, is the indolent, alcoholic, untrainable harlot described earlier (page 20) as the wife of the lazy sot, V 85, and the mother of his incorrigible ten-year old son.

Finally, V 151, born at N. H. in 1862, was alcoholic, and licentious, and cohabited with many men. By a lazy sot of a cousin, V 97, she had an illegitimate child, a criminalistic son. She died of exhaustion at the age of twenty-eight.

This ends the description of Line D. In one branch lack of sex-control with alcoholism is striking; in another branch there are several cases of criminality, eccentricity in manners, suicide, and untruthfulness, suggesting a more highly developed mentality of the second case than in the first, with tendency toward deterioration.

8. Line E

This line starts from II 11, born in Massachusetts about 1770, who was the son of the founder. He married II 10, had two children, III 24 and 25, emigrated to New
III 24. York, and later went West. His son, III 24, moved to Illinois, and reared a family of
III 25. whom nothing is known. The unambitious daughter, III 25, remained behind and married her cousin, III 26, an industrious, honest, but indigent man belonging to Line F. He received out-door aid and in old age became childish. From this cousin-pair were
IV 60. derived five children, IV 60, 61, 62, 64, 65, all born in Nam Hollow. About IV 62 nothing is known, except that she was childless. The eldest, born in 1865, was without industry or ambition, but is well spoken of for honesty. He went to the Civil War, deserted,

married his cousin, IV 38, a Nam-like, disorderly woman, who had previously, by a causationless, unambitious, but industrious cousin, an illegitimate son, who developed into an inefficient and licentious man.

They had seven children, V 152–158, of whom V 156 died at the age of seven months of diarrhea, and all the rest are slow in movement, unambitious, and illiterate. V 152 is retiring, indigent, without reasoning capacity, but with a retentive memory, honest, and chaste. He married his cousin, V 84, a suspicious, causationless, alcoholic harlot, and had by her eleven children, of whom four died in infancy. Of the remaining seven, VI 228, 229, 230, and 231, all are slow in movement, unambitious, and unable to learn at school, and all but one, VI 231, reticent and shy. VI 228a is an alcoholic harlot; VI 228b is also alcoholic, VI 229 is a harlot now living in Nam Hollow in the poorest circumstances; VI 230 is a suspicious alcoholic, licentious, untruthful thief, who married a cousin, and soon deserted her; and VI 231 is a suspicious, vicious alcoholic, who married a cousin with whom he lives in filthy surroundings. Here, again, we see Nam-cousins, inbreeding for three generations, and the fraternity derived from the second generation has already nearly reached a condition of uniformity in respect to lack of social traits and self-restraint.

V 153 is alcoholic, never married, when ten years old was in the County House for five months because of bad habits and destitution. V 154 is the "crazy" mother, by her cousin, V 86, of the feeble-minded progeny described on page 20. V 155 is an eccentric, shy, taciturn woman who had by her husband, the variable progeny described at page 21. V 157 is a shy, taciturn prostitute. She married a first cousin, V 192, who lacks industry and ambition. He was irascible, incestuous, alcoholic, criminalistic, and a vagrant. They had seven children, of whom the five survivors are all feeble-minded (see below, page 34). V 158 is a lawless, vicious, indigent, licentious, alcoholic man, who like every other one of his fraternity married a cousin. His wife is VI 134, an active, illegitimate harlot by whom he had two feeble-minded, licentious sons. Thus the entire fraternity, derived from IV 60 and IV 138, shows not a single redeeming combination of socially desirable traits.

IV 61. We now take up the second brother of this line, IV 61, an indolent, dishonest, treacherous, alcoholic, who was a horse-jockey. He married from outside the Nam family, an ambitious and chaste daughter, III 66, of a self-respecting father, and a mediocre fraternity. She degenerated after marriage. They had eleven children,, and then in 1901 at the age of seventy-two she died of apoplexy, followed two years later by her husband. All of the children grew up, and they show no longer the uniformity of type of the children of two generations of cousin-marriages, but a great diversity instead. V 161, 163, 164, 166, 170, 173, and 179, something over half of all, are Nam-like. Respectability of the mother's type appears in V 167, 168, and 175. V 178 is a religious fanatic, who has been in an asylum. We must consider them and their progeny in turn.

V 161. V 161, opinionated, and a pauper, married a "foreign" wife of whom little is known. Her grand-daughter VII 78, is a lazy, careless, mentally backward child. He later married V 161, who is herself slow, unambitious, opinionated and chaste. She came from a good

family, has deteriorated since marriage, and now lives in a filthy shack in "New York." She had eleven children all of whom survive. Here too, as in the father's generation, some are "good" and some are "bad." Rather more than half are industrious. None are prostitutes, harlots, or extreme alcoholists. There is one criminal and several who are poor at school work. The good blood tells even amidst bad surroundings. VI 235 and 236, both industrious, have a daughter who is an average worker in school but is ill-tempered. VI 237 is indolent, disorderly, irascible, and improvident. VI 239 is active, neat, and self-esteeming, and married an ambitious, self-respecting man. Their eldest daughter is quick, has speech defect, and her eyes, like those of her father's father, show an opacity over the center of the pupil, which does not seriously affect the sight. VI 241 is a fairly ambitous man who married a prostitute. VI 244, who was intemperate, was arrested and sent to the State Agricultural and Industrial School for committing burglary in the third degree and grand larceny in the second degree; he was a farm laborer. VI 245 was dishonest. VI 247a is physically and mentally slow. VI 247b is lazy, forward, and talkative.

V 163. V 163 is alcoholic and has cohabited with his niece, VI 287, with V 165, and with
V 164. other women. He now lives in a hovel near B. V 164, a harlot, married an ingenious
V 166. cousin, V 90, and had a somewhat various progeny described at page 21. V 166 is a temperate, sociable, and licentious man, who married his cousin, V 183, a Nam-like, stolid, shy, reticent, suspicious harlot. They had eight children, of whom there survive VI 257, 258, 259a, b, 260a, b, c. All have the characteristic slowness in movement, and indolence and lack of ambition of the Nams. They vary little except that some are more reticent and shy than others, and there is some licentiousness. All are illiterate, and probably without the capacity for learning from books. VI 257, who is especially careless, disorderly, and shy, had an illegitimate son, who died of infantile diarrhea. Here again we see the uniformity resulting from inbreeding.

V 167. V 167 is a self-respecting, thrifty farmer, who married a cousin, VI 141, already
V 168. referred to (page 23) as having delusions and derived from an "insane" mother. V 168, born in 1865, though slow is of the better type. He married V 169, born in 1874, an industrious, orderly, neat, economical, chaste woman. Two of their four older children do average, and two do good work, at school. All are industrious, and the two that have reached the age of puberty work in the paper mill and are chaste. This fraternity shows the influence of the good determiners from both parental germ-plasms, and especially those of the mother.

V 170. V 170 is more of the Nam type, an irregular worker, shy, taciturn, suspicious, inefficient, indigent, without reasoning power, illiterate, and with a complicated sex history. He married his second cousin, V 204, a girl of excellent bringing up by a foster mother, but shallow minded and showing little mental grasp. They had nine children, of whom seven, VI 264a, b, c, d, e, 265, 268, have survived, the youngest being nine years old. All seven are slow in movements, and at least the three older ones show lack of ambition. Two of the older daughters are prostitutes, and one who is married is regarded as chaste. None have an education, chiefly because they cannot do the work necessary in acquiring

it. By the Binet test one shows a retardation of three years, another of five years. VI 265 at sixteen is vicious, incorrigible and a wanderer. VI 268, born in 1880, has married a cousin, V 186, an unambitious and somewhat vicious vagrant, and had three children, VI 291, of whom the eldest is retarded at school and nervous. Here again we see that the inbred weakness has failed to develop strength. V 170 cohabited with V 171, born in 1872, a quiet, industrious, neat woman, who by V 172, an indolent, licentious man, had a son, born in 1889, who hung himself. She had also three illegitimate children, of whom two are backward and one does average school work. The product of the next breeding experiment of V 171, was two twins, who were strangled after birth and put in the stove, and a girl born in 1911.

V 173. The Nam-like V 173, always alcoholic, licentious, and indolent, married V 174, had seven children by her and died in 1909 of Bright's disease. His wife was quiet, lazy, unambitious, indifferent, extremely indigent, and chaste, living in a hovel in L. She is a sister of the lazy dishonest man we have met as the husband of IV 22 (page 16). Of the six children who survived infancy, all are retarded at school, slow and unambitious and the five boys are said to be good natured.

V 175. V 175, born at N. H. in 1863, is the self-respecting, chaste girl who early left the hollow and went to C. She selected as a husband an unambitious but steady worker, chaste and a church-member. They have had three children all active, industrious, and chaste. Of these the son has left the locality. Here is a better combination of

V 178. germ-plasms! But V 178, born in 1863, was less fortunate. She has a uterine disorder, is suspicious, a religious fanatic, and was in the State Hospital for the Insane, from 1898 until 1903. She married V 177, indolent, unambitious, but chaste, who died of tuberculosis in 1891, having had by her a son who died a few hours after birth, and a daughter, VI 281, who is slow and unambitious, but industrious and orderly about the house. This daughter committed incest with her uncle, and by V 513, an uneducable, unambitious man of licentious and criminalistic "blood," has three young children, of whom the eldest (twelve years) is in the fourth grade, is disorderly and taciturn, while his sister, born in 1901, is in the third grade and is quiet and shy.

[*The Consort of VI 281.*—The study of the pedigree of this man (V 513) reveals much of interest. We go back to generation III and begin with an honest and industrious man (III 84) born in New York State in 1800. A cancer grew in his throat and he

IV 242. choked to death in 1850. Nothing is known of his wife, but they left two sons, IV 242 and 243 (Chart C).

The eldest is a slow, quiet, industrious, honest, unambitious, and illiterate man, a mason by trade and a church sexton for many years, who like his father died of cancer on the face in 1904. He married a slow but talkative, and opinionated person, IV 241, who is now depressed, shows memory defect for past events, and has become generally very deteriorated in mind. They have seven children, V 495, 497, 499, 501, 504, 506, and 509.

The first, V 495, is an alert, industrious, orderly, forward, talkative, suspicious, persistent woman, dishonest in word and deed, irritable at times and placid at others,

superficially pleasant and gentle. After the death of her husband she had licentious relations with men and is now cohabiting with a vacillating, submissive, elated, religious man in "New York." Her principal illness has been from erysipelas. Her husband, V 494,* was unindustrious, temperate, and licentious at times, without perseverance or initiative, but with much mechanical ability and an inventive mind. Always partly supported by his unfortunate sibs he finally died at the age of thirty-five of diabetes. This pair had four children, VI 436, 437, 438, and 439. All were retarded in school work. The eldest daughter, VI 436, is slow in movements, unambitious, restless, forward, stubborn, dishonest, and with strong sex impulses. Her brother, VI 437, is also unambitious, dishonest, untruthful, and stubborn, and now a pick-pocket at the age of seventeen. His sister, VI 438, is slow and stereotyped in movements, shy, reticent, stubborn, listless, indifferent, wayward, and now in the State Training School for Girls. The youngest daughter is the best of her fraternity, quick-moving, prompt and even a little forward.

The second, V 497, is chaste, married, and had one child which died young. The third was industrious, neat and orderly. She died childless at the age of forty of cancer of the intestines, the third generation of cancer.

The fourth, V 501, was an unambitious, but industrious, steady, quiet, even bashful, good-hearted, and chaste man, with no education. He married V 502, an industrious, alert, neat, imperious, chaste woman who is slightly nervous and easily excited, and they had four children, VI 441, 442, 444, 445. Two of the daughters are slow moving, quiet, and chaste. One of them married an industrious member of a degenerate family in K., and has a quiet neat daughter of seven years. The third daughter was born only after prolonged labor and with the aid of instruments. She is slow and quiet, even taciturn, has occasional twitching of limbs and epileptic seizures in which she becomes rigid and unconscious. Finally, the only son, though industrious at times, is restless, non-dependable, a wanderer who supports himself by farm labor.

The fifth, V 504, is an industrious, chaste man who died at the age of forty years of blood-poisoning following an abscess on the thigh. His wife committed suicide in 1909. Their two children died early, one at eight days, and one at two years, of congestion of the brain.

The sixth, V 506, is a lazy, inefficient man who, like his brother, died of blood-poisoning following an abscess above the hip.

The seventh, V 509, is indolent, disorderly, shiftless, alcoholic, and illiterate. He married V 510, his first cousin, a lazy, shiftless, prostitute who has one ambitious, effective brother, and one who is uneducable, and unambitious like his father, the brother of IV 242. This pair had three slow, unambitious, careless, undependable sons.

V 494. We have spoken above of V 494, the consort of V 495. His family is interesting. His father, IV 239, is physically slow and taciturn, industrious, and careful, agreeable, but inclined toward depression, a hard worker at his trade of blacksmith, but now indigent. By his first wife, IV 238, he had a son who is indolent, unambitious, uneduc-

* See below (p. 32) for a fuller account of the traits of his germ-plasm.

able, a wanderer, and licentious. By his second consort, IV 240, a slow, unindustrious, careless, irritable, dishonest, unfaithful woman, he had eight children, V 480, 482, 485, 487, 489, 490, 492, 494. One died early of meningitis. The survivors are very variable.

V 480 is quiet, industrious, good-natured, and stubborn. He pursues his father's trade of blacksmith and has earned a comfortable living. He is a wanderer and licentious, goes away from home with strange women, and has spent six months in the county jail for cohabiting. His wife is quiet, industrious, orderly, calm, cheerful, economical, and chaste. They have three children. The first, VI 426, is an alert, industrious, ambitious, careful, orderly, honest, persistent, slightly nervous, talkative and chaste girl, employed as a clerk in a dry-goods store. Her younger sister of twenty years is in striking contrast, uneducable, fickle, moody, forward, a good pianist and vocalist, wayward and licentious. Her brother, of twenty-one years, hated school, played truant, and was a petty thief and pick-pocket. He was sent to a Catholic orphanage and is now reliable. The mother also must have carried defective germ-cells.

V 482 is an industrious and chaste but unambitious woman who married an irascible, alcoholic, licentious man and had by him two children, of whom one died in infancy, and a daughter is industrious and chaste.

V 485 is a sluggish, indolent, untidy, irritable, and licentious woman who married and had one mentally retarded and tubercular child. She left her husband and is cohabiting with an unindustrious, unambitious, illiterate man, capable only of odd jobs. By him she has two young daughters.

V 487 is an alert, careful, orderly, kind, and sympathetic woman, a good worker and with a fair education, but recently suffering from "nervous prostration." By her industrious but alcoholic and then cruel husband she has two active children of whom one is shy and the other confiding.

V 490 is a sluggish, periodically industrious, erotomaniac,—a printer by trade but a wanderer. His sister, V 492, is a lethargic, untidy, improvident harlot who occasionally works in the mill. Finally, V 494 is the man who married V 495 of the family described above.]

V 179. Finally, V 179, an ignorant harlot, married a cousin, V 93, an industrious, ambitious, and self-respecting man, one of an otherwise Nam-like fraternity, and had four children, VI 282, 284, 285, and 287. VI 282, born at C. in 1888, a Nam-like, alcoholic man, for the past year has cohabited in a shack at C. with the alcoholic prostitute VI 283, born in 1886, who has been in both jail and penitentiary for disorderly conduct. After the child was born the mother was arrested and she and her child were sent to the State Reformatory for Women. VI 284, born in 1885, after a career of indolence, alcoholism, and licentiousness, has at last found his proper place in a State Hospital for the Insane with a diagnosis of "catatonic stage of dementia precox." VI 285, born in 1882, is a dishonest, periodically industrious, alcoholic, licentious gambler, has married a prostitute and was last year sent to the County House on account of illness and destitution. Finally, the elder sister, VI 287, born in 1875, the licentious alcoholic, has had by her lazy alcoholic cousin, V 64, two young children who show signs of mental disturbance (page 17).

IV 64. The next of the founders of Line E (after IV 62, of whom nothing is known) is IV 64, born at N. H. in 1829, an industrious, but unambitious alcoholic who lived in a log hut in the woods. He married first IV 63, then III 50, and died in 1896 of "suppurative pyophlebitis." IV 63 was a prostitute who had drifted to N. H. She was industrious and apparently had some refinement. By IV 64 she had four children. Of these V 180, born at N. H. in 1865, was an ignorant harlot who married V 93 after the death of his first wife, but left him no children. V 182 is a typical alcoholic Nam. He never married. V 183, a Nam-like, stolid, shy, reticent, suspicious, harlot married as we have seen (page 30) her temperate and licentious first cousin, V 166, and had seven surviving children, all Nam-like. V 181, born in 1864, is Nam-like, destitute, alcoholic, and licentious. He married IV 162, one of a family of three illegitimate children of an ignorant harlot, all showing an absence of divers social traits. IV 162 is, herself, active, industrious, careful, illiterate, and lives in a shack near G. From this mating came five children, VI 288a, b, c, 289, and 290, all slow in movements and poor in school. Thus VI 288c, eleven years old, is still in the first grade. The eldest son, aged twenty-one, is lazy and licentious. VI 290, born in 1889, is lazy, has been in domestic service, had an illegitimate child, and is now a prostitute in E.

The alcoholic founder of this branch, IV 64, next married III 50, born in 1843, a reckless harlot and the sister of harlots, who died in 1899 of pneumonia, after having had eight children, all born in the Hollow, V 184, 185, 186, 187, 189, 191, 192, and 193. They were all ignorant and unambitious. About half were slow in their movements, the others active. In alcoholism and licentiousness also they varied. Thus three of the females, V 184, 187, and 191, were harlots. V 185 was the most active; he married a harlot. V 186, born in 1879, was industrious at times, somewhat vicious, and a wanderer. He married a cousin, VI 268, who is considered chaste, but is Nam-like in movements; she is descended from V 170 (see page 31). They have three young children of whom the eldest already shows retardation at school. V 187 is quiet, shy, and reticent. By V 188, a man who comes from a good family with feeble-mindedness running through it, she had an illegitimate son, VI 292, born in 1904, who cannot learn, is indolent, listless, indifferent, irascible, and incorrigible. V 189 is industrious, neat and considered chaste. She married an unambitious, mildly intemperate man and has an infant child. V 191 has had two illegitimate children (one dead) by V 289. V 192, born in 1867, is irascible, vicious, alcoholic, and a wanderer. He has committed incest with two of his daughters, was in State prison for two terms, county jail four terms, and the House of Correction one term. The crimes committed were assault, larceny, arson, burglary, and stabbing. He married IV 162, in 1880, but left her and married his first cousin, V 157, an indolent, illiterate, taciturn prostitute who is ill-treated by him, and has borne him seven children. Omitting one who died at three years, and one who is two years old, all are feeble-minded on the basis of school work. One is an indolent wood-chopper; one cannot enunciate distinctly; one is a harlot, and the other a professional prostitute, whose first lessons in vice were probably received from their licentious father. Finally, V 193, inefficient and alcoholic, lives alone in the mountains in Vermont. Such is the stuff of which criminals are made.

IV 65. The last of Line E is IV 65, born in 1835, dull of wit, indolent and unambitious. He lived for a time in a log hut in N. H., married the industrious harlot, IV 66, and has now gone West where he is running a house of assignation in a city. They have had two children. The second is active, but licentious, a prostitute. The first, V 194, has no idea of causation, is unambitious, but fairly industrious and temperate. He married V 308, born in 1872, of a licentious fraternity. She was herself illiterate, had been admitted to the County House at fourteen years that her illegitimate child might be born there, and had again become pregnant, being cared for by her uncle, V 114. She married V 194 and had four children by him. After his death she had a child, which soon died, by VI 177, and died herself in 1903 of puerperal fever. Of the four children of V 194 and V 308, the first, VI 299, is Nam-like, filthy, disorderly, and alcoholic. When young she was in a house of prostitution in the city of C. Later she married a cousin, VI 231, a lazy, surly, vicious alcoholic belonging to a typical Nam fraternity (see page 29). VI 300 is a lazy and vicious wanderer. VI 301a, and b, are two slow, indolent girls. VI 302 is the illegitimate daughter of V 308. She died at nine months of diarrhea.

Line E illustrates again the strengthening influence in the Nam family of good outmatings. Here also certain combinations are seen to have resulted in criminality combined often with incest.

9. Line F

II 14. This line starts with II 14, of low grade mentally, and her husband, II 26, a distant cousin. They lived in a hovel in Nam Hollow, and reared five children, III 26, 27, 28, 29, and 31. Except III 28, who got up and went West, all were unambitious, ignorant and poor. III 29 was drowned at the age of forty by falling from a bridge while intoxicated. Of III 26 we have already traced the descendants (page 28). III 27, born in 1800, was alcoholic and received town aid in 1847. He married his cousin, IV 8 (see page 15), a bright, chaste woman, and had a lazy, ineffective son. III 28 is the ambitious man whose descendants are traced on pages 8 to 10.

10. The Nap Family

Among the families with which the Nams have intermarried is one whose connections are so numerous that its germ-plasm has been studied with something of the same thoroughness as that of the Nams themselves. To this family we may give the name of the Naps.

We start with a man who was born in 1750 in Massachusetts, married, moved to G. in New York State, had three children, II 16, 17, 18, and died before 1850. The history of II 17, who married III 11, and her descendants is described in a relatively "good line" under Line B. II 16 was an unambitious, inefficient, indigent male, and II 18 was a slow unambitious harlot. The descendants of II 16 will constitute Line G, those of II 18 Line H (Chart B).

11. Line G

II 16. The indolent, inefficient, indigent man, II 16, married a poor ignorant woman, born in 1780, spoken of as "crazy" by old residents. She worked in the fields, had six children, III 34, 38, 40, 41, 42, lived in a hovel in G., and died about 1860. Of the children two

II 42. (III 40a, b) went West and are lost to view. Another, III 42, was a self-respecting, but hypochondriacal woman who married an industrious, genial, but slightly intemperate man who died at the age of forty of "gangrene of the hand," leaving one child, IV 153, and his wife who died in poverty in 1880. This child, it may be said, grew to be a quiet, industrious, somewhat educated man, who married an epileptic woman of illegitimate birth, who bore him an industrious, active, chaste son, V 360, who married IV 174, a well equipped woman, by whom he had six normal children and one daughter who is retarded, vicious, and had an illegitimate child. This line is, socially, fairly satisfactory. The other members of III 42's fraternity were III 34, an industrious but unambitious, alcoholic man who "had spells in which he acted queer," III 38, an unambitious, ignorant harlot, and III 41, an alert, industrious, polite, ingenious, but illiterate man. These three fountain-heads are different and we may expect that this difference combined with the operation of the law of like-matings, will result in dissimilar progeny.

III 34. The neuropathic III 34 married an eccentric and alcoholic woman who belonged to a socially undesirable strain. For she had a degenerate brother, III 36, who, besides one common-place son, had an indolent, inefficient, eccentric, suspicious, and licentious son, IV 317, who by an eccentric cousin, IV 18, had two eccentric sons, V 376 and 377, whom we shall meet again. The presence of eccentricity is thus evident in the consort of III 34. From this marriage there were eleven children born between 1836 and 1860:—IV 104, 110, 112, 114, 115, 116, 117, 119, 122, 123, and 125. All were uneducated, partly, perhaps, on account of insufficient opportunity, but partly, certainly, because of inability to learn at school. Of the four sons two were industrious and two indolent. Both the latter and one of the former were alcoholic. One was licentious and served a term in State Prison on the charge of forgery. Of the seven daughters all were harlots, one of these being recognized as simple-minded. One sees that the germ-plasm is pretty empty. The matings of this fraternity are largely made with another family which we might call THE NAR FAMILY. The history of the Nar family starts with an ignorant harlot, born in 1820 in Vermont, who tramped the roads, married III 33, and had by him ten children, IV 91, 94, 96, 97, 99, 101, 103, 109, 111, 113 (Chart B). She was an inmate of the County House four times and received outdoor aid, finally being sent to the Insane Hospital in 1884, where she died in 1896. Her husband was indolent, unambitious, treacherous, and had an unsocial disposition. He lived a wandering life with his wife and died of cancer of the stomach in 1896. What kind of children came from this combination of germ-plasms? One was said to be industrious, deliberate, orderly, but a wanderer. Two were markedly licentious, imbecile, and incapable of supporting themselves; one of them committed suicide following dementia. Both of the other two were untruthful and dishonest. One of them stabbed a man and attempted to rob him, later shot and killed a negro in New York City and died in the State Hospital for Convict Insane. All five daughters were licentious, three living in harlotry. One served a term in State Prison. From the union of the Naps and the Nars what is to be expected?

12. The Nars and their Unions with the Naps

IV 91. Let us consider first the Nars as the less complicated family. IV 91, born in 1840 at G., was industrious, unambitious, and licentious when young. She married an eccentric man who keeps a second-hand store in N. and they had three children, V 263, 264, and 266. Both sons are industrious day-laborers but unambitious. The daughter was a professional prostitute and died in a hospital after an operation.

IV 94. IV 94 is slow in movements, unindustrious, untruthful, unambitious, alcoholic, and a thief. He has received town help for his family to the amount of two thousand dollars during the last twenty years. He married a sluggish, unambitious, disorderly, dishonest, untruthful, but chaste woman, who works pluckily for her children (or begs at houses) and lives in filth and squalor. Her strain is bad, for her two brothers are habitual criminals both now serving terms in State Prison for robbery. This unfit mating yielded eleven children. One died of rupture at the age of two weeks, and one of appendicitis at the age of eight years. All the others grew up and are slow in movements and are poor pupils at school. Of the six sons two have some ambition. Another, two years old, has a fleshy polypus growing from the external opening of the right ear. Another has curvature of the spine, and a heavy body on small ill-shaped legs, is club-footed, ataxic, has internal strabismus of both eyes, a high-arched palate, a bad articulation, and an uncontrollable temper. Of the three daughters the eldest (twenty years old) is a professional prostitute and alcoholic, and has been arrested for disorderly conduct. Her next younger sister at thirteen years is already licentious. The youngest at eleven is lazy but her sex-impulses are still dormant.

IV 96. IV 96 is the best of the lot, industrious, quiet, deliberate, orderly, but a wanderer. He married an industrious, quiet, neat, chaste woman who bore him five children and died last year of pneumonia. The baby died of pneumonia about the time the mother did. The eldest child, born in 1896, is sluggish, nervous, poor in school work, and chaste. The other three, all girls, show the stronger traits of the mother, are good to excellent at school, active and quiet.

IV 97. IV 97 is a quiet, industrious, neat and orderly woman of a licentious tendency. She married at fourteen but left her husband and went to live with IV 98, an active, industrious, but ambitionless, untruthful, and dishonest man who in 1905 served a term in State Prison for theft, during which period IV 97 cohabited with IV 193. After his release she married IV 98 and lives with him in a small house in G. They have had nine children, V 274, 275, 276, 277, 278, 279. One was born with a "bifid spine" and died in infancy. One died at two months from indigestion. Another at two years had spasms, became black in the face, unconscious, and died. A son had scarlet fever when six weeks old, was left paralyzed in the legs and imbecile, dying at the age of twenty-two of tuberculosis. Of the three surviving boys one early had cataleptic seizures in which he became black in the face but has had no recent repetition of them. He is incapable of learning, indolent, indifferent to work, but good-natured. A brother is quiet, indolent, unambitious, taciturn, and does fair work at school. The third is an excellent scholar and does farm work. Of the two daughters the younger is quiet, slow, and incapable of

school-work, but a persistent worker in the house. Her sister, born in 1883, is industrious and untidy, and was a harlot before her marriage to VI 368, an industrious but alcoholic and licentious farm-laborer by whom she has had four children, one still-born, the eldest of the others doing good school work. Except for her licentious tendency, IV 97 is a woman of some capacity and has helped to found a strain which though bad is by no means the worst.

IV 99. IV 99 is, or has been, a harlot; she married and had one child that died young of tuberculosis.

IV 103. IV 103 is a quiet, lazy, disorderly harlot who married an industrious, chaste ex-soldier, IV 104, a member of the Naps, who had good intentions, but was inefficient, a ne'er-do-well. By him she had nine children, V 286, 289, 291, 293, 295, 297, 298, and 299. Of these two died very young, and one died at eleven years by drowning. Of the three sons all are industrious, but differ in ambition. Of the three daughters two are

V 286. industrious, and now chaste, the other a lazy harlot. V 286 is the lazy, filthy, disorderly harlot who married V 287, an industrious, licentious man, a mason by trade, and had six children by him before he left her to live in a poor hovel near A. Three of the children were very weak, one dying at six hours, one at five months of bronchitis, and one at two years of tumor and epilepsy. Here we see beneficent selection at work. The son who is now fifteen years old is good-natured, good at school work, but cannot express himself well. The daughters are both professional prostitutes, but differ in that the older was a poor pupil at school, has no self-respect, and is alcoholic, while the other was a good student and although disorderly at home dresses neatly when at service or street-walking.

V 295. V 295, an industrious, neat, careful, economical woman, was licentious before her marriage to V 296, by whom she had a boy that died when four months old of pneumonia. Then she married V 294, an active, industrious, alcoholic, unfaithful blacksmith, and had one son who at fourteen proves to be, though a good worker, unteachable from lack of verbal memory.

V 299. V 299, finally, is slow, quiet, industrious, illiterate, chaste. She was married at fourteen years to V 300 by whom she has had seven children. She is kind to these children but on account of poverty unable to provide any other than poor living conditions. Her husband, born in 1855 at B., comes of fair stock. His father, IV 106, was a keen, economical, business-like farmer, though alcoholic, and had a brother who was a careful, resourceful, and financially successful farmer, equipped with good-nature, and a good memory. He was a fine singer and was the father, by a thrifty good-natured mother, of an industrious, business-like, jovial, temperate, and chaste son. The mother of V 300 was a neat, industrious, chaste woman, and his brother, V 303, had the ambition, resourcefulness, and success in farming that are found in others of the stock, which with the union of a consanguineous, equally orderly, good-natured, and chaste blood produced two active, good-natured, chaste children.

V 300. V 300 himself was likewise cheerful but alcoholic and, when under the influence of liquor, licentious and irascible at times. At the age of twenty he inherited his father's farm in B. and this he gradually sold to buy liquor. In later life he lost ambition and

became careless of appearances. He married first V 301, an intelligent, chaste woman, and had by her an active, orderly, gentle and chaste daughter, and three sons, all industrious like their stock, two ambitious and mildly intemperate, and one unambitious, alcoholic, and licentious. By V 299, as stated, he had seven children, VI 364–365, ranging in age from fifteen to three years. All are active, and the three who are in school do good work. The young ones are playful and not at all shy. Since the traits on both sides, apart from alcoholism, are good, we may expect that if they do not succumb to drink they will turn out well. At least this is the sort of family which probably contains determiners that will repay cultivation.

IV 103. IV 103, after the death of IV 104, cohabited with a lazy alcoholic man with a fair education, and a wide interest in current events. They had five children, V 281, 282, 283, and 284, of whom one died directly after birth. The only daughter, born in 1891, is active, industrious, and neat, a good pupil at school, but now a harlot. Of the three sons one was poor in school work, slow, lazy, and unambitious. The others were good students, but one of them is lazy, unambitious, alcoholic, licentious, careless, dishonest and untruthful, and the other is ambitious, orderly, industrious, honest, and truthful. He has left his parental and fraternal associations in A. and is doing well elsewhere. These children are not yet old enough to show all of their traits, but they are clearly very dissimilar.

IV 109. The remaining children of III 32 and 33 married into the Nap family. IV 109 was slow, unambitious, occasionally industrious, simple-minded, licentious, indigent, and living upon the earnings of his prostitute daughter. He married IV 110, a typical Nap, physically slow, careless, causationless, irritable, prevailingly depressed and licentious. Their only child, V 305, is a forward garrulous, illiterate prostitute who plies her profession in large cities.

IV 111. Another mating between the same two strains is that between IV 111 of the Nars and his wife IV 112 of the Naps. He was without causation, an inmate of the County House for two weeks in 1884 on account of dementia and illness, and committed suicide in 1890. She is also without foresight and a harlot. They lived in a small hut and had born to them there two sons who died early, a daughter who was a harlot and died childless at the age of thirty-five years, and another daughter, illiterate, and the mother of two illegitimate children at the ages of fourteen and fifteen. She married a miserable Nam, V 194, of Line E, by whom as already shown, page 35, she had four children, all slow, the boy a criminal, and the oldest girl an alcoholic prostitute.

IV 113. The last mating of Nars and Naps is that between IV 113, a causationless harlot who lived in a hovel and died at the age of twenty-seven of tuberculosis, and IV 114, an indolent, calm, spasmodically working, formerly alcoholic man, who after his wife's death sent his children to the Orphan Asylum, and now lives in a hovel at G. They had three children of whom the boy died in the Orphan Asylum at the age of six years of tuberculosis. What was the fate of the two daughters placed in the care of the "Asylum" at nine and eleven years respectively? The elder, V 308, was so incompetent that she could not learn to set the table or other simple operations of house-work. Following the

damnable custom of many such institutions she was "placed out" with a man and wife in a distant town, and had by this man an illegitimate child, born in 1890, in the County House. This boy, however, has ambition and industry from his father's side of the house and is doing well. After he was born his mother was sent back to the Orphan Asylum, but was permitted to go to the family of a married man living some distance away. By this man she became again pregnant and had V 374, now a boy of fifteen, of whom it is known only that he is slow in movements. The younger sister of the foregoing, V 310, was not amenable to government, and was disobedient and licentious. She finally ran away, and is now a prostitute in the assignation section of ——. In 1894 she had an illegitimate child who is with her father's people. Such is the product of two inhibitionless germ-plasms of the Nar and the Nap strains.

13. Line G (*Continued*)

We now take up the further descendants of that part of the Nap family which have not married with the Nars. First we consider IV 119, an ignorant harlot who married a cousin of "medium mentality" and had two children of whom one died young. Her sister, IV 122, was an imbecile harlot who had three children, V 318, 319, and 320, by a "queer, foolish," taciturn, illiterate cripple, whose limbs became covered by sores before he died at the age of seventy-eight, of ulcers, empyemia, and general debility. She died of cerebral hemorrhage. Their son died young. V 318 was eccentric and licentious. By a licentious cousin she had two indolent, unambitious, eccentric, suspicious sons, of whom one is syphilitic and in an elated mood. Both sons have been recently married. V 319 is a macrocephalic idiot, who has never walked, talks but little, and is supported by a pension from the United States Government, her father having been a veteran of the Civil War.

IV 119.

We now go back to the third generation and take up the descendants of III 41, the alert, industrious, polite, ingenious man who married a boisterous, profane woman, a Nat, and had by her nine children, IV 130, 132, 139, 140, 141, 142, 144, 145, and 151. He died in 1897 of a malignant disease of the liver (cancer?). She died in 1895 of heart disease. Of the four sons one is ambitious and one lacking in ambition, two are indolent, one spasmodically industrious, and there is one who likes to work. IV 141 is a wanderer and nothing further is known about him. IV 142 is licentious and childless so far as known. IV 144 is talkative, opinionated, and alcoholic. By the lazy VI 178 he had one macrocephalic son. The remaining male, IV 130, is the only satisfactory one of the lot, an active, somewhat ambitious, Civil War veteran. Of the five daughters four at least were harlots. Two are stated to be neat, none had much, if any, education, one was markedly lacking in intelligence. We will consider in order such as had children.

III 41.

IV 132, born in 1863 at A., is a quiet, industrious, neat, imperious, causationless woman, at one time a harlot, who married an industrious chaste man, and had six children, V 326–329. One died at four months of diphtheria, one was fatally burned at two years, the other four were good at school work, the eldest, alert, industrious, and chaste, has recently married. IV 138, born in 1862 at A., formerly a harlot, is now chaste. She

married a man who was lazy when young, but later gained thrift and industry. They have had eight children, V 330, 333, 334, 335, 337, 338. The two sons are still young. All the daughters are industrious and chaste. IV 140, an indolent harlot, married an unambitious, lazy, inefficient wanderer who lives in the mountains near Q., and they have had seven children.

IV 145 is an active, industrious, neat, good-natured woman, formerly a harlot. She married IV 146, a slow but industrious, ambitionless man and had ten children by him, V 341, 344, 346, 348, 349, 350, 351, 352, and 353. Of these one died at three years of pneumonia, and one at four years of "rheumatism." Of the four remaining males two are industrious, and two lack industry; two are considered chaste, and one was licentious and committed suicide after an attack of the grip. The other, V 346, married. He is lazy, unambitious, optimistic, and good-natured. He married an active, industrious, orderly, calm, chaste, but illiterate woman, who cannot count change. They had ten children, V 386–388. One died at five weeks of meningitis. Every one of the surviving children is poor in school work and slow in movements. All of the five girls who have reached puberty are considered chaste, including one of twenty years who works in a hotel. Two are characterized by poor memory. Of the daughters of IV 145 and 146, the eldest, V 341, born in 1868 in Vermont, at the age of thirteen developed epilepsy. Two others are industrious and chaste, while one is a disorderly, alcoholic harlot. This fraternity shows a mixture of good and bad traits. V 341 began to have dizzy spells at thirteen, married at fifteen, left her husband to cohabit with V 342, and finally completely lost her mind. By the industrious but alcoholic V 340 she had a son, VI 381, chaste and industrious, and a daughter, VI 382, quiet and chaste. By V 342, a gentleman farmer, she had an illegitimate son. A sister, V 344, is industrious and chaste, and by a similar husband has a like daughter.

We pass now to IV 151, the girl who is regarded as "not bright." She married an ambitious, industrious, chaste man, IV 150 (whose mother was the sister of the mother's mother of V 27), who had previously married the industrious and chaste IV 149 and had five industrious and chaste children. From his second marriage he had five children, V 354, 355, 356, 357, and 359. Three are vicious and licentious, and two are industrious. V 354 we have already met with as the vicious husband of the harlot VI 199 (Line A), the mother of three lazy backward children. V 355 is the vicious, mannish appearing, harlot whom we have met as the consort of the criminalistic alcoholic, V 73. Two of the children are feeble-minded and one also criminalistic. The contrast between the produce of the first and second marriages of IV 150 is a striking testimony to the value of good consorts for the production of strong children.

Finally, we may consider III 43, the self-respecting hypochondriac who married the slightly intemperate, industrious, genial III 42 who died at 40 years of gangrene of the hands. Their only son was a quiet and industrious man (IV 153) who had, by an epileptic wife, an industrious and chaste son—a blacksmith (V 360) who, by an active chaste wife, had 7 children who are doing average work at school except one who is retarded, vicious and licentious, having an illegitimate child.

14. Line H

II 18. The founders of this line are the slow, ambitionless harlot II 18, who lived in hovels around A. and G., and her unambitious, inefficient, indigent consort (II 19) who spent the last years of his life, from 1876, in the county poorhouse. They had six children (III 45, 46, 48, 49, 50), one of whom went West early and another of whom died in early youth in consequence of an ulcerated tooth. The other four are woman, all of whom (except,
III 45. perhaps, one) are illiterate harlots. III 45 married an industrious farm laborer and by him had six children, IV 155, 156, 157. There were two pairs of male twins who emi-grated, one daughter who died, aged 5, in the orphan asylum and another who was a causationless harlot who left no progeny. Thus this branch came to an end in this
III 46. locality. The harlot, III 46, had (by an indolent, ineffective, licentious man) an indolent, licentious daughter who married the alcoholic licentious pauper, V 109 (Line D), and had a son who went West and two who remained, both of them industrious and licentious.
III 49. The harlot III 49 had three illegitimate children (IV 159, 161, 162) by unknown men,—the children all licentious. The only son is vicious, irascible and alcoholic; one of the daughters, though industrious and careful, is taciturn, and by the Nam-like, licentious V 181 (as described under Line E) she had five sluggish children, all incapable of doing school work and two at least sex-offenders.

The remaining branch of this line has already been described in Line E. The harlot
III 50. III 50 had by the alcoholic IV 64 three children, of whom two are licentious and one a criminalistic vagrant.

15. The Nats

Interwoven with the Nams is another family which has come out of localities A. and E., and which we may refer to as the Nats. Their history begins with two brothers,
II 21. II 21, about whose traits little is known, and II 23, industrious and self-respecting but inefficient. The first son had nine children: III 51, 52, 54, 55, 57, 58, 60, 61, 62. Two went West, one died of tuberculosis and another died early without having married. The two remaining sons were ambitious, industrious, and chaste. Of the three remaining daughters, two were neat and chaste and one was boisterous and profane,—a marked
III 51. exception to the others that grew up. III 51, the profane daughter, married the socially "good" III 41 as described under Line G (p. 40) and had a variable but mostly un-
III 55. desirable, lazy, licentious progeny. III 55, neat and chaste, had five children (IV 169–172) by her active, industrious husband, who, however, tried to hang himself. It seems probable that his stock was neuropathic; his sons were vicious and alcoholic and three served terms in jail, but his daughter was industrious and chaste. IV 169 was a wanderer, in jail for breach of peace. By a causationless harlot, already mother of five illegitimate children (all, except one insane son, fairly efficient children), he had three offspring, V 371, 372, 373. This woman belongs to a mixed strain. She has an active chaste brother, but one of her sisters was a vagrant harlot; another was industrious, orderly, and chaste, married a slow unambitious man, and had fourteen children, now scattered, of whom it is reported that all the ten sons are socially unfit, and one had epilepsy, while the four daughters were on higher planes. The produce of this union of the vagrant IV 169

(with a noisy, profane, doubtless mentally disordered, aunt) and the harlot (with an epileptic relative) is not good. Their son is rough, vicious, profane, alcoholic, and licentious; one daughter is an epileptic, a pauper in the town poorhouse when she died at the age of 26, and the remaining daughter is indolent, disorderly, and licentious.

III 62. We return to Gen. III and find the ambitious, industrious, chaste III 62 married to a woman of unknown antecedents, adopted at one year, for a time a village school teacher, but now lazy, without ambition and probably licentious. They had five children: IV 174, 175, 178, 179, 180, of whom one died of pneumonia when one year old. All the others show, for the most part, the good traits of their father (and of their mother

IV 174. during her youth); they are active, industrious and chaste. IV 174 married V 360, the blacksmith, as stated at the end of line G, and had six fairly satisfactory children

IV 175. and one who is "bad." IV 175 married a lazy, unambitious, alcoholic vagrant and had three children, of whom one died at three months of enteritis; the second was an indolent, inefficient, undesirable man who married a chaste girl, reared by foster parents, and had a child who died young. The third is active and respected, a good scholar who married but died, childless, of acute meningitis.

IV 178. IV 178 married IV 177, the industrious but mildly intemperate brother of her sister's husband (IV 176). They had three children (V 384, 385, 387) before she died of tuberculosis. Two emigrated early; the one son who remains is a slightly ambitious, industrious farm laborer.

IV 180. IV 180, though bright at school and industrious, selected bad associates and was sent for a term to State Prison for stealing. He married IV 181, a licentious woman of licentious stock. For her father, III 64, was an inefficient alcoholic rake and her mother, though of genial disposition, has had a complex sex history. By III 64 she had seven children besides IV 181. At least five of them are certainly licentious; two are vicious as well, and one has served a term in State Prison for stealing, and a daughter is imperious and cruel to her children. Their descendants are no better. The harlot IV 188 had three or four indolent and coarse children by one man and placed two of them in an asylum; then she had three children by another man. Of those, the two older ones were placed by the mother in an orphan asylum, where their stolidity bodes ill for the future. The slow, causationless, talkative, industrious IV 190 had, first, an illegitimate daughter who is a professional prostitute of experience in several cities, twice a mother and a syphilitic; then she had by IV 159, an irascible, vicious, alcoholic man, four children, of whom two died in infancy,—the remaining daughter is a prostitute and the son licentious and a burglar, now in the State Reformatory. The licentious IV 193 had by a causationless, talkative harlot with an illegitimate, unambitious, illiterate daughter, an unambitious, illiterate, but deferential son. The forward, imperious, IV 195 married an industrious, irascible, overbearing man, a sharper, unscrupulous in his dealings with his less "smart" neighbors and had five children, of whom one died at birth while all the others are backward in school. The eldest son has business ability like his father, is mildly intemperate and went into the army; two boys are wilful and stubborn, and the girl is unambitious, quiet and still chaste. Such are the traits of the

blood into which IV 180 married. He had one child, a son, born ten years ago, at present bright and active but showing signs of neurotic make-up.

II 23. We now take up the descendants of II 23, the industrious and self-respecting but
III 66. ineffective man. By his wife, whose parents are not known, he had three children, III 66, 67, 69. The first, an ambitious, chaste woman who later degenerated and became improvident, careless and disorderly, married IV 61, a treacherous alcoholic, and had the children described in Line E, some licentious sots and others self-respecting and respected
III 68. of others. III 68 married a quiet, slow and industrious farmer and had seven children:
IV 200. IV 200, 201, 203, 205, 207, 209, 212; probably all are industrious and chaste. The first married an industrious and chaste hypochondriacal woman and has three industrious
IV 201. and chaste children (b. 1888–1902). The second is blunt and independent, married an alcoholic farmer and has two active children (b. 1898–1900) who are doing good work at
IV 203. school. The third has saved money and has four active children doing good work at school.

The three sisters IV 207, 209, 212 married into the same extensive, outside fraternity, of English origin, from an industrious father. There were eight children in the fraternity: IV 208, 210, 213, 214, 217, 219, 220, 222. In this strain there is no licentiousness and little laziness.

The first son IV 208 is active and industrious but with little persistence. He married
IV 207. IV 207, a quiet depressed woman with little initiative, and has seven children: V 415, 418, 420, 422, 423. None is licentious but, with only two exceptions, they are poor at school. V 416 is quiet, industrious, temperate, a farm laborer with internal strabismus of both eyes. V 418 is quiet, industrious but unambitious and V 420 is an industrious farm laborer who is epileptic.

IV 209. The daughter, IV 209, married the industrious, quiet, orderly, chaste IV 210 of the English family. His germ-plasm is indicated by his eight children by another wife, who, however, was frank, talkative, had had epilepsy all her life, leading to mental deterioriation. Of the eight children, one died at six years of spinal meningitis, about one nothing is known, there are four youngsters who are doing fair work at school. The eldest daughters have had epileptic fits from an early age and one of them is licentious. Her next younger sister is industrious and chaste. The father's mating with the Nat girl yielded two daughters of whom one died of pneumonia when very young; the other married and moved away to Pennsylvania, an unusual exhibition of ambition.

IV 212. The remaining mating between the Nats and the English family was between IV 212, sluggish, irascible, epileptic and mentally deteriorating, and IV 213, alert, lacking discretion and constancy, subject to delusions and loss of memory. This neuropathic pair had eight children: V 435, 436, 438, 440, 441, 443, 444. With such mental defect in the parentage, we may predict disaster in the progeny—here they are:—V 435a, male, sluggish, industrious but unambitious, uneducable, temperate, steals, masturbates. His brother, V 435b, sluggish, unindustrious, uneducable, epileptic, a masturbater, licentious and infected with gonorrhea. Another brother, V 436, also sluggish, unindustrious and licentious, uneducable, masturbater, was arrested for arson and committed to the State

Hospital for Criminal Insane where he now is. A sister, V 438, industrious, but easily excited, irascible and epileptic, married and has already two young children; both shy, one with a disease of the eyes. Another brother, V 440, sluggish but steady and industrious, did poor work in school, was considered chaste and a religious fanatic. Another brother, V 441, is industrious but unambitious, licentious, vicious and eccentric. A sister, V 443, is a macrocephalic dwarf, with high arched palate, soft dry skin, and short finger nails, is retarded in school work and boisterous. Finally, V 444, died at 13 months following whooping cough and spasms. Should this highly neurotic blood be allowed not merely to perpetuate itself but to multiply itself indefinitely?

16. Summary of Characteristics

In the following tables an attempt has been made to bring together in compact form such characters of the Nams and allied families as are of social importance. The children are placed in such proximity to their parents and to the grandparents on one side as to make it easier to see evidence of inheritance of traits. Unfortunately, very little is known about the family traits of the consort who is out of the main line; but what little is known is added in parenthesis or a cross reference is made to the part of the table where the consort is described among its blood relatives.

Table of Abbreviations

A, alcoholic. A_3, sot.	a, not alcoholic.
B, blind.	bro, brother.
C, criminalistic.	
Ch, child.	
D, deaf.	
E, epileptic.	
F, feebleminded.	frat, fraternity.
G, garrulous.	g, taciturn.
H, honest.	h, dishonest.
Hy, hysterical.	
I, insane.	illeg, illegitimate.
K, industrious.	k, not industrious.
L, capable of learning at school.	l, incapable of learning at school.
Lt, literate.	lt, illiterate.
Ne, neurotic.	mar, married.
O, orderly.	o, disorderly.
P, progressive and ambitious.	p, not ambitious.
	pau, pauper.
Q, quick.	q, slow.
R, possessing causality or appreciation of the relation of things.	r, lacking causality.
Sh, shiftless.	sh, not shiftless, resourceful.
	su, suicide.
Sx_1, has cohabited with three or more consorts.	
Sx_2, licentious male or harlot female.	
Sx_3, prostitute.	
Sx_4, erotomaniac.	
T, good tempered.	t, irascible.
Tb, tuberculosis.	
W, vagrant, wanderer.	w, sedentary.
	yg, young.

♂, male.
♀, female.
†, died. † inf, died in infancy.
?, before a male parent, implies doubt as to the paternity of the offspring.
?, after a trait symbol, implies a little doubt as to its applicability.
Italicized individuals, are those who have married into the fraternity and are not of the Nam blood.

Summary of Line A

III 2, ♂, k, p, lt.
III 1, ♀, p, q, Sh.
IV 1, ♀, † young.
IV 1a, ♂, Lt, p, q, t, self-respect.
IV 2, ♀, K, Lt, q.
V 3, ♀, K, lt, p, Q.
V 2, ♂, A, lt, Sh, W, (2 E sisters).
VI 1, ♀, E, F, p, q, Sx_3.
VI 2, ♂, D, E, l, q.
VI 3, ♂, L, q.
V 4, ♂, † at 2 yrs. of pneumonia.
V 5, ♀, † at 2 yrs. of pneumonia.
V 6a, ♂, K, P, Q, Sx_2.
V 6b, ♂, K, p, Q.
V 6c, ♂, p.
V 6d, ♂, p.
V 6e, ♂, lt, p.
V 7, ♀, Lt, q, Sx_2, W.
V 8, ♀, K, Sx_2, † Tb.
V 11, ♀, K, Q, Sx_2.
V 12, ♂, k, p.
VI 5, ♂, l, p, q.
VI 6, ♀, k, l, p, q.
V 13, ♀, k, p, Sx_2.
V 14, ♂, K, lt. } 3 Ch, 1† inf. of pneumonia.
V 15, ♀, p, q.
cousin
VI 249, ♂, A, K, Sx_1, l, ingenious, mechanical ability.
VI 11, ♀, l, q, illeg.
cousin
VI 10, ♂, K, p, q.
V 15, ♀, p, q.
V 16, ♂, K, lt, P.
VI 12a, ♂, F, q, intractable.
VI 12b, ♂, l, q.
VI 13, ♀, age 3 yrs.
VI 14a, ♀, † 1 yr. pneumonia.
VI 14b, ♀, † 1 day.
III 7, ♀.
first cousin
III 8, ♂, A, k, lt, p, t, (B Line).
IV 5, ♂, A, K, P, went west. (See page 81.)
IV 6, ♀, Sx_2.
cousin
III 31, ♂, F, p, pau. (See Line F).
IV 85, ♂, K, sh.
IV 84, ♀, K, Q, Sx_2, t.

{ V 248, ♀, K, sx.
{ *V 247*, ♂, K, P, sx.
VI 338, ♀, K, Lt, sx.
others young.
V 249, ♂, K, P.
V 251, ♂, K, P, Q.
{ IV 87, ♀, K, sx.
{ *IV 86*, ♂, K, Q.
{ V 253, ♂, K, Lt, P?, sx. } 2 Ch, bright, tractable.
{ *V 254*, ♀, K, Q, sx. }
{ V 255, ♀, K, Q, sx. } 2 Ch, K and neat.
{ *V 256*, ♂, A?, K, Lt, Q, sx. }
{ V 258, ♀, K, Lt, sx. } 2 Ch, K, Q, sx.
{ *V 257*, ♂, K, sx, respected (brother to 256). }
{ IV 88, ♂, A, k, Sx, incest. } 2 ♀, both Sx_2.
{ *IV 89*, ♀. }
{ IV 6, ♀, lt, Sx_2.
{ *III 30*, ♂, † Bright's Disease.
{ IV 83, ♀, K, p, W.
{ *IV 82*, ♂, k, q, p, su (of a degenerate family).
V 232, ♂, A?, K, Lt, P, Sx_2, W, farm laborer.
V 234, ♂, lt, W, farm laborer.
V 235, ♂, K, l, Q.
V 236, ♀, F, q, Sx_2, a domestic servant.
V 236b, ♀, G, k, l, q, Sx_2, forward.
V 238, ♀, K, Lt, sx.
{ V 240, ♀, G, p, Q, Sx_3, forward. } 1 Ch, Q, playful.
{ *V 239*, ♂, k. } 1 Ch, F, t.
{ V 242, ♀, K, Lt, Q, sx, t. } { 1 Ch, spina bifida.
{ *V 243*, ♂, A, K. } { 4 † young.
V 245, ♀, K, Sx_2.
{ *IV 29*, ♀, K, Q, sx. } { 1 Ch, A, k, p, Sx.
{ cousin } { 1 Ch, A, k, p.
{ IV 7, ♂, A, k, p, q, pau. } { 2 others.
{ *IV 30*, ♀, K, Q, sx.
{ cousin
{ IV 7, ♂, A, k, p, q, pau.
{ IV 8, ♀, P, sx.
{ *III 27*, ♂, A, K, pau.
IV 67, ♂, p, q.
{ IV 9, ♂, A, p, q, t, cruel, pau (Q at times).
{ *IV 232*, ♀, K, sx, † Tb. Father, K, Sx, peculiar. Father's brother, K. Sister, pau. Sister's son, A, h.
Brother, F.
{ V 21, ♂, A, K, O, P, sh. } Son, † inf.
{ *V 22*, ♀, K, Q, O, t, morphine. }
V 23, ♂, a, K, P, sh.
{ V 25, ♂, A, G, k, lt, p, Q, Sx_2, T. } { ♂, went west.
{ *V 26*, ♀, K, Sx_2 (1 sister, Sx_2, 1 sx). } { ♂, K, P, sx.
{ ♀, P, sx, T.
{ V 28, ♂, k, lt, p, q. { ♂, A, K, Q, t.
{ *V 27*, ♀, K, sx, † apoplexy (became suspicious, excitable, demented).
VI 20, ♂, K, Lt, P, Q, sx.
{ VI 23, ♀, K, Q, sx, T.
{ *VI 22*, ♂, I, K, Lt, Q, morphine, painter.
VII 5a, ♀, L, Q.
VII 5b, ♀, D, L, Q.
VII 6, ♂, K, L, P.
VI 24, ♂, K, sx.

V 28, ♂, k, lt, P, q.
V 29, ♀, k, q.
VI 27, ♂, F, K, Lt, p, sx.
VI 28, ♀, k, Lt, sx, T.
VI 30, ♀, k, l, p, Sh, sx.
V 33, ♂, A, k, q, W.
V 36, ♀, K, Lt, Q, sx, respected.
VI 35, ♂, H, K, Q, sx.
VI 32a, ♂, H, K, Q, † Tb.
VI 32b, ♂, H, K, Q, † Tb.
V 36, ♀, K, Lt, Q, sx, respected.
V 37, ♂, A, k, lt, Sx_2.
VI 33, ♂, A, k, p, q, vicious.
VI 34, ♀, Q, sx, O.
IV 9, ♂, A, p, q, cruel, pau, (Q at times).
IV 10, ♀, K, Q, sx, † pneumonia (intelligent, sx family).
V 38, ♂, A, k, p, q, T.
V 145, ♀, lt, Sx_2, † ch-birth.
VI 198, ♀, K, O, Q, sh, sx.
V 366, ♂, K, formerly A, Sx? (mother F).
VII 64a, ♂, A, k, l, q, Sh, Sx_2, W.
VII 64b, ♂, K, l, P, self respect.
VII 64c, ♂, k, l, p.
VII 64d, ♂, 6 yrs., cowardly, shy.
VII 65, ♀, 3 yrs.
VII 66, † 1 mo. pneumonia.
VI 199, ♀, lt, Sx_2.
V 354, ♂, k, Sx_2, vicious; mother, F.
VII 67, 2 ♀, k, l, o, p, q.
VII 68, ♂, k, l, q.
VI 200, ♂, F, K, Lt, P, sx.
VI 210, ♀, k, l, sx, t.
V 39, ♂, A, K, p, q.
cousin
VI 112, ♀, lt, Q, Sx_3.
VI 36a, ♂, † 1 yr. inflammation of lungs.
VI 36b, ♂, † 1 yr. cholera infantum.
VI 36c, ♂, † 8 mo. cholera infantum.
VI 37, ♀, † 1 yr. cholera infantum.
VI 38a, ♂, K, P, Q, sx, farm laborer.
VI 38b, ♂, sx, wood-chopper.
VI 39, ♀, k, p, q, Sh, Sx_3.
VII 16, ♂, q, t, shy, stubborn, age 3 yrs.
V 41, ♂, A?, K, P, Q, sx, Tb.
V 40, ♀, A, K, Lt, sx?.
VI 41, ♀, K, Q, sx.
VI 44, ♂, K, P, Q, sx.
VI 43, ♀, K, Lt, sx.
VII 17a, ♂, 5 yrs.
VII 17b, ♂, 1 yr.
VI 46, ♀, K, Lt, sx.
VI 45, ♂, Sx_2, lazy, vicious.
VI 48, ♀, socially satisfactory.
VI 49, ♂, socially satisfactory.
V 42, ♀, Lt, O, Q, sx.
V 43, ♂, A, k.
VI 50, ♂, A, k, Ne, p.
VI 51a, ♂, K, Lt, Q, sx.

VI 51b, ♂, A, k, p, Sx_2.
VI 52, ♀, K, Q, sx, † appendicitis.
VI 53a, ♀, K, Lt, Ne, P, sh, sx, eccentric.
VI 53b, ♀, K, p.
VI 54, ♂, K, p, wood-chopper.

{ IV 11, ♀, lt, Sx_1 (in later years sx).
{ *III 86*, ♂, k.

{ IV 68, ♀, F, Sx_2.
{ cousin
{ *V 121*, ♂, g, lt, cripple, "queer."
V 198, ♂, A, C, h, K, lt, p, Sx_2, t.

{ IV 69, ♂, k, p.
{ *V 463*, ♀, lt, Sx_2, father Sx.
V 199, ♀, K, O, Sx_2.
V 200, ♂, A, C, Sx_2, W.

{ V 201, ♂, A_4, F?, k, p, q, pau, Sx_2.
{ cousin
{ *VI 250*, ♀, lt, q, r.
VI 317, 3 ♂, A_3, K, p, Sx_2.

{ IV 11, ♀, lt, Sx_1 (in later years sx).
{ *III 28*, ♂, P, abandoned wife and went west (Line F).

{ IV 72, ♀, F, Sx_1.
{ *IV 73*, ♂, K, deserted.

{ V 204, ♀, F?, sx, adopted and well brought up.
{ *V 170*, ♂, F, g, lt, p, q.

{ VI 268, ♀, k, q, sx.
{ cousin
{ *V 186*, ♂, C, K, P, W.
VI 291a, ♀, l, Ne.
VI 291b, ♀.
VI 291c, ♀.

VI 264a, ♀, k, p, Sx_3, domestic service.
VI 264b, ♀, k, p, Sx_3, domestic service.
VI 264c, ♀, k, q, shy, lacks reasoning capacity.
VI 264d, ♀, l, q.
VI 264e, ♀, l, q.
VI 265, ♂, k, l, W, vicious.
VI 266, ♂, † 1 yr. diarrhea.
VI 267, ♀, † 5 mos. strangulation of larynx.

IV 74, ♂, killed in Civil War.

{ *IV 75*, ♀ (illeg. Ch) k, p, Sx_2, t, unpopular.
{ Unknown consort.
V 209, ♂, k, p.

{ V 210, ♀, Lt, O, sx (Sx_2 when young).
{ V 61, ♂.

{ *IV 75*, ♀ (illeg. Ch), k, o, p, Sx_2, unpopular.
{ IV 76, ♂, A?, C, K, Q, Sx (incest), t, pau, cataract.
V 211, ♂, † Tb, age 14.
V 212, ♂, k, p, Sx (incest), t.
V 214, ♀, F, E, pau, Sx (incest).

{ V 215, ♀, lt, Sx_4, † pneumonia.
{ *V 216*, ♂, G, K, forward.
VI 325, 2 ♂, K, lt, q, sx.

V 217, ♀, K, P, Q, Sx_4.
V 219, ♂, A, k, p, pau, r, adopted and well brought up.

{ IV 76, ♂, A?, C, K, Q, Sx (incest), t, pau, cataract, stubborn.
{ *IV 78*, ♀, F, k, pau, r, Sx_4 (1 bro, F; another, F, C, incest).
V 222a, ♂, K, sh, farm laborer.

V 222b, ♂, K, farm laborer.
V 222c, ♂, F, r.
Illeg. V 223, ♀, F, pau.
IV 80, ♀, K, Q (Sx$_2$ when yg).
IV 81, ♂, K, Sx$_2$.
V 225, ♀, K, sx.
V 227, ♀, K, sx.
V 229, ♀, K, sx.
V 230, ♀, K, sx.
V 231, ♂, K, sx.
VI 327a, ♂, K, L, Q.
VI 327b, ♂, K, L, Q.
IV 12, ♂, † at 25 yrs, Tb.
IV 15, ♂, A, K?, p, q.
IV 14, ♀, K, q, sx, † Tb.
V 45, ♀, K, sx.
V 44, ♂, K, sx.
VI 57, ♂, K, Q, stage driver.
V 46, ♀, K, Q, sx.
IV 71, ♂, A, k, p, q, sx, of F stock, † heart disease.
VI 59, ♂, D, F, k, q.
VI 60, ♂, A, K?, p.
cousin
V 199, ♀, K, Sx$_2$, neat.
VI 61, ♀, K.
V 197, ♂.
VI 303, ♂, A, K, O, P, Q, sh, T, illeg.
VI 61, ♀, K.
V 198, ♂, A, C, K, Lt, p, Q, Sx$_2$, t.
VI 305, ♀, K, l, O, p, Q, Sx$_2$, T.
VI 304, ♂, A?, K, lt, p, Q.
VI 306a, ♂, † inf.
VI 306b, ♂, † 2 mos., inflammation lungs.
VI 306c, ♂, † 4 mos., cholera infantum.
VI 307, ♀, † 2 yrs., cholera infantum.
VI 308, ♂, P, q, sx.
VI 411, ♀, l, q, t, assertive.
VI 309, ♂, A$_4$, Sx$_2$.
cousin
VI 132, ♀, A, k, Lt, q, Sx$_2$.
VI 310, ♂, A, p, q, Sx$_2$.
cousin
VI 258, ♀, g, k, l, q, reticent, shy.
V 47, ♂, A, K, Sx$_2$, t.
V 48, ♂, A, K?, Lt, pau.
V 464, ♀, Sx$_2$ (Father, A, K, Sx. Sisters, a, sx, with 1 C, 1 K, and 1 F child. -b, Sx. -c, Sx, had one son religious fanatic).
VI 63 ♀, K, Q, sx.
VI 64, ♀, K, sx.
VI 65, ♀, k, Q, t, Sx$_3$, morphine user.
VI 66, ♂, K, Lt, disliked.
VI 67, ♀, K, sx (adopted).
VI 69, ♂, † pneumonia at 18 yrs.
V 51, ♂, K, P, sh, respected, business ability.
V 50, ♀, K, Lt, sx, neat.
VI 70, ♂, K, P, Q, sh, sx.
VI 72, ♂, K, Q, school-teacher.

VI 73, ♀, K, sx, alert, well educated.
VI 74, ♂, K, Lt, q, sx.
VII 21, ♂, Q, alert, prompt.
VII 22a, ♀, K, L, O, P, Q, alert, prompt.
VII 22b, ♀, K, L, O, P, Q, alert, prompt.
VII 22c, ♀, Q, neat, prompt.
V 52, ♂, A, K, sx, respected, went west, prosperous farmer.
V 54, ♂, A, K, p, Sx_2, went west (p. 83).

LINE B

III 8, ♂, A, k, p, t.
III 38, ♀, E, p, pau, Sx_2 (1 bro, A, E, or Hy. 1 bro, K, ingenious. Sister, hypochondriac. Mother, "crazy." Father, k, p, pau).
IV 16, ♂, A, K, p, went to Minn. See page 82.
IV 17, ♀, A.
V 55, ♂, 6 boys all A, Sh; 2 girls married.
IV 19, ♂, A, K, lt, P, went to Minn. See page 82.
IV 18, ♀, an "average woman of her class."
Five sons all inefficient, not energetic, and more or less A.
Two daughters married well, have bright talented daughters and Nam-like sons.
IV 21, ♂, A_3, K, pau, Q, t, abusive.
IV 20, ♀, A, K, Q, Sx_2 (sx when yg), t.
V 57, ♀, K, lt, O, Q, Sx_4 (now sx), neat.
V 58, ♂, K, Lt, Sx_2.
VI 76, ♀, E, Q.
V 59, ♂, A, k, lt, p, Q, farm laborer, jailed for disorder.
IV 22, ♀, sx, intelligent, † typhoid pneumonia.
IV 23, ♂, k, O, p, would not pay debts.
V 61, ♂, K, lt, p, q, sx.
V 210, ♀, O, pau, Sx_2 (now sx), illeg (mother, pau).
VI 80, ♂, Lt, p, q, conceit, music.
V 62, ♂, k, lt, p, q, Sx_1, farm laborer.
V 63, ♀, k, l, p.
VI 82, ♀, A, k, l, q, Sx_2.
VI 83, ♂, k, l, q, Sx_2, wood-chopper.
V 64, ♂, A, k, lt, p, Sx_1.
V 455, ♀, k, o, q, Sx_2, t, W, peevish (1 sister, K, sx, fine husband, studious son. 1 sister, slower, poor husband, 2 F sons, 1 F, Sx dau and 1 t dau; 1 sister, k, Sx; 1 sister, k, Sx, all children, F).
VI 84, ♀, A, G, k, lt, o, q, Sx_2, forward.
VI 85, ♀, k, lt, q, Sh, Sx_2, reticent, shy.
VI 86, ♂, C, k, p, q, Sx_2.
V 64, ♂, A, k, lt, p, Sx_1.
cousin
VI 287, ♀, A, k, o, Sx_2, t, forward (mar. an uncle, A, o, Sx, had dau, Sx_3). Has illeg. dau. aged 13, F, o, t.
VI 87, ♀, † 4 mos., pneumonia.
VI 88, ♂, g, q, age 6, open-mouthed.
VI 89, ♀, q, age 3 yrs.
V 65, ♂, K?, q, Sx_2.
V 66, ♀, o, p, q.
VI 92a, ♀, k, p, q, sx.
VI 92b, ♀, k, p, q.
VI 92c, ♀, k, L, q.
VI 93a, ♂, k, l, q.
VI 93b, ♂, q, tongue-tied.
VI 94, ♂, q?.
VI 95, ♂, 2 yrs.
V 67, ♂, K, O, P.
V 68, ♀, sx.

VI 96, 2 ♂, K, Q.

{ IV 25, ♀, lt, pau, Sx_2, W.
{ *IV 26*, ♂, k, lt, Sx_1.

{ V 73, ♂, A, C, k, Sx_2.
{ *V 355*, ♀, C, Sx_2 (2 bro, C, Sx; 3 sisters Sx).

VI 108a, ♂, k, l, q, vicious.
VI 108b, ♂, l, q.
VI 109, ♀, l, q, Sh.

{ V 72, ♀, F, k, p, Q, pau, Sx_2.
{ *V 71*, ♂, A, k, Sh, negro.

VI 98a, ♂, A, k, l, Sx_2.
VI 98b, ♂, C, W, ran away early.
VI 99, ♀, burned to death.

{ V 72, ♀, F, k, p, Q, pau, Sx.
{ *V 470*, ♂, k, lt, o, p, q, r, talkative (some socially good relatives).

VI 106, ♀, k, l, q, Sx_2 (has ch age 3, q, t, stubborn).
VI 104, ♀, k, l, q, married in 1911.
VI 100a, ♂, p, Q, farm-laborer.
VI 100b, ♂, l, q.
VI 101a, ♀, l, q.
VI 101b, ♀, g, l, q, macrocephalic.
VI 101c, ♀, q, shy.

{ III 11, ♂, k, pau, r.
{ *II 17*, ♀, k (bro, pau; sister, Sx).

{ IV 29, ♀, K, Q, sx.
{ *IV 7*, ♂, A_3, k, p, pau, q.

V 75a, ♂, went to Minn. Now blind and slow mentally (p. 83).
V 75b, ♂, A, k, p, q.
V 75c, ♂, A, k.
V 76, ♂, † inf.

{ IV 30, ♀, K, Q, sx, superior to environment.
{ *IV 31*, ♂.

V 78, ♂, gone west.

{ V 79, ♀, sx.
{ *V 80*, ♂, k, p, Sx_1.

VI 112, ♀, K?, Q, Sx_3.
VI 113, ♂, k, p, q, Sx_2, cripple.

{ IV 30, ♀, K, Q, sx, superior to environment.
{ *IV 32*, ♂, lt, p, q, basket-maker.

{ V 81, ♂, k, o, p, pau, q, Sx?.
{ *IV 136*, ♀, P, Q.

VI 115, ♀, k, Lt, p, Sx_3.
VI 116a, ♂, A, K, lt, p, q, Sx_2.
VI 116b, ♂, A, C, K, lt, p, q, Sx_2.

{ V 82, ♂, K, P, t.
{ cousin
{ *V 83*, ♀.

VI 118, ♂, K, Q.

{ III 13, ♀, A, p.
{ *III 12*, ♂.

IV 34, ♀, disappeared.
IV 35, ♂, k, p, Sx_1.

LINE C

{ III 13, ♀, A, p.
{ *III 14*, ♂, C, pau.

{ IV 37, ♂, A, k, pau, q, † cerebral hemorrhage.
{ *IV 36*, ♀, A, Sx_2.

V 84, ♀, A, r, Sx_2, suspicious.
cousin
V 152, ♂, h, lt, p, q, pau, r, sx, good memory. (Father, H; mother, slut, poor stock. See Line E, —mostly A, F, k, Sx, reticent, suspicious.)

V 85, ♂, A, k, lt, † dropsy.
VI 423, ♀, Sx, † Tb. Canadian family with mechanical ability but Sx.
VI 119, ♂, a, K, P?, Q, Sx_2, farm laborer.
VI 120, ♂, † young.

V 85, ♂, A, k, lt, † dropsy.
cousin
VI 224, ♀, A, k, l, q, Sx_3, † Tb.
VII 77, ♂, 10 yrs., C, W, stubborn.

V 86, ♂, A, K, P, Q, ingenious.
cousin
V 154, ♀, I, pau, r, hysteria, Nam-like frat, g.
VI 121, ♂, k, q, † pneumonia.
VI 122, ♂, A, k, o, p, Sx.
incest
VI 123, ♀, A, o, Sx.
VII 27, 2 children destroyed by mother at birth.
VI 124, ♂, A, p, q, wood-chopper.
cousin
VI 173, ♀, G, l, q, forward.
VII 54a, ♀, q, bashful.
VII 54b, ♀, q, bashful.
VII 55, ♂, shy, age 3 yrs.
VII 56, ♀, † inf.

V 87, ♂, A, p, q, good worker.
cousin
V 155, ♀, g, lt, p, q, eccentric, listless, shy. (Sister of V 154 above).
VI 127, ♀, K, O, Q, neat.
VI 126, ♂, A, k, p, Sx_2.
VII 28, ♀, L, O, Q, sx, memorizes well.
VII 29, ♀, A, k, l, p, q, Sh.
VII 30, ♂, q, Sh, runs away.
VI 128, ♀, A, k, l, p, Sx_2.
cousin
VII 35, ♂, A, k, p, q, Sh, Sx_2, T.
VI 129, ♂, A, k, p, q, Sx_2, stammerer.
cousin
VI 229, ♀, k, l, o, q, Sx_2, shy, reticent.
VI 130, ♂, a, K, Q, sx, thrifty.

V 88, ♂, k, p, † Tb.

V 89, ♂, A, k, p, q, Sx_2.
cousin
V 112, ♀, A, K, lt, p, pau, Q, Sx_2, t.
VI 181a, ♂, A, k, lt, p, q, Sx_2.
VI 181b, ♂, A, k, p, q, Sx_2.
VI 181c, ♂, A, k, lt, p, q, Sx_2.
VI 181d, ♂, A, k, l, p, q.
VI 181e, ♂, A, k, l, p, q.
VI 182, ♂, A, k, p, q, Sx_2.
VI 185, ♀, F, q, Sx (incest) illeg daughter, slow and bashful.

V 90, ♂, K, p, pau, t, ingenious, mechanical ability.
cousin
V 164, ♀, k, pau, q, Sx_2, † uterine hemorrhage.

{VI 250, ♀, lt, pau, q, r.
cousin
V 201, ♂, A, F, r, Sx_2 (Sx strain).

VI 317, 3 ♂, A_4, K, pau, Sx_2.

{VI 249, ♂, A, K, Sx_1, ingenious; mechanical ability.
VI 248, ♀, K, P, Q, Sx_2, T, † Tb (has 1 illeg Ch).

VII 85, ♂, g, L, p, q, T.

VII 86, 3 ♂, † inf.

{VI 249, ♂, A, K, Sx_2, ingenious, mechanical ability.
V 15, ♀, K?, p, q.

VI 11, ♀, l, q.

VI 10, ♂, K, q.

VI 251, ♂, g, K, p, q, Sx_2, ingenious, mechanical ability, shy.

{VI 252, ♀, K, Lt, O, p.
VI 253, ♂, K, Lt, o, p, pau.

VII 88, 3 ♀, † inf.

VII 89, 2 ♂, † inf.

VII 90a, ♀, l.

VII 90b, ♀, l.

VII 90c, ♀.

{V 91, ♂, p, steady, † cancer.
V 92, ♀, A, lt, o, p, pau, q, r, Sx, basket-maker.

{VI 133, ♀, A, D, k, o, q, r, Sx_2, basket-maker.
VI 422, ♂, A, h, K, Lt, Q, Sx_2, lying, mechanical ability. (Frat, Sx. See consort of V 85.)

VII 31, ♀, k, l, p, q, Sx, Sh.

VII 33, ♀, k, l, o, Sh, sx, adopted.

{VII 35, ♂, A, k, l, p, q, Sx_2, T.
cousin
VI 128, ♀, A?, k, Lt, p, Q, Sx_2, neat.

VII 36a, ♂, k, l, q, Sh, Sx_2, T.

VII 36b, ♂, O, P, q, T.

VII 37, ♂, E, F, idiot.

Three died young.

Two still young.

{VI 134, ♀, K, lt, Q, Sx_2.
cousin
V 158, ♂, A, C, lt, pau, Sx_2.} 2 ♂, F, Sx.

{VI 135, ♀, A, k, lt, o, r, basket-maker.
cousin
V 146, ♂, A, C, h, k, lt, o, t, W. (Sister, F, pau, Sx. Cousin, F, M, Sx.)

Ch all q, shy.

VI 136, ♀, C, r, Sx_2.

VI 137, ♂, p, r, choked to death.

VI 138, ♂, A_3, g, k, q, Sx_2, basket-maker.

{IV 38, ♀, k, o, q.
cousin
IV 60, ♂, k, H, p. (Father and mother cousins. Frat has many unsocial traits.)} See Line E.

{IV 39, ♀, k, o, p, q.
cousin
III 17, ♂, A, k, Sx_2.

V 92, ♀, A, lt, o, p, q, r, Sh, Sx, t. See above.

{V 93, ♂, A, K, P, pau.
cousin
V 179, ♀, Sx_2.} 4 Ch—C, Sx_2. See Line E.

{V 95, ♀, I.
V 94, ♂, went west.

VI 141, ♀, I, q, sx.
cousin
V 167, ♂, H, K, P, respected.
} 1 Ch, 15 yrs., k, o, shy.

V 96, ♂, k, p.
cousin
V 150, ♀, A, k, lt, Sx_2.
} Progeny F. See Line D.

V 97, ♂, k, p, moved away.
V 98, ♀, sx, (2 bros, F, k; Father, A; Mother, sx).

VI 143, ♂, K, L, P, Q, sx.
VI 144, ♀, K, Q, sx.
VI 145, ♀, K, L, Q, church member.

V 98, ♀, sx (see above).
V 99, ♂, K, sx.
} 3 † inf.
1 avg. grade at school.
1 l, weak eyes.

IV 39, ♀, A, k, o, p, q, Sx.
cousin
IV 51, ♂, k, q.

V 100, ♀, F, idiot, illegitimate.

III 15, ♂, pau, woodsman.
cousin
III 16, ♀, lt.

IV 40, ♀, † at 16, measles.

III 17, ♂, A, k, P (Line D).

III 19, ♀, sx (of bad blood).
cousin
III 20, ♂, H, K, pau, church member.

IV 45, ♂, k, pau, ingenious.
IV 168, ♀, r, Sx_2 (had illeg Ch at 14, frat g, Sx).

V 113, ♀, Sx_2, vicious.
IV 169, ♂, A, C, k, Sx_1, W.

V 115, ♀, lt, Sx_2, t, strabismus, vicious.
V 116, ♂, A, K, p, Sx_2.

2 Ch poor at school.
1 Ch fair at school.
1 Ch young.

V 118, ♀, K, sx (formerly Sx_2).
V 117, ♂, K, P (bro to VII 6).
} 3 Ch all K, l, P.

IV 45, ♂, k, pau, ingenious.
IV 46, ♀, disappeared.
} 1 dau of good repute.

IV 48, ♀, Q, sx, ingenious.
IV 47, ♂, went west.
} 1 son "doing well."

IV 50, ♂, K, p, r.
IV 49, ♀, Q, Sx_2 (mother had mulatto children).

V 121, ♂, † age about 19, Civil War.
cousin
IV 68, ♀, F, Sx_2 (bro K).

V 198, ♂, A, C, h, K, p, Q, Sx_2, t (mar 1st a 14 yr. old harlot).
VI 61, ♀, K, lt.

3 Ch Sx.
1 Ch K.

V 198, ♂, A, C, h, K, p, Q, Sx_2, t (see above).
cousin
VI 257, ♀, k, lt, o, p, q, Sh, shy.

Slow child.

V 124, ♀, K, P, sx, went west.

IV 51, ♂, k, q, t.
cousin
IV 39, ♀, k, o, p, q, Sx.
} See above.

{IV 53, ♂, a, K, sh, t, religious. / *IV 52*, ♀, K, Q, sx.} 2 good dau.
{IV 55, ♂, K, Q, sx, t, business ability, cruel to wife. / *III 54*, ♀, K, O, sx (of mostly good blood).}
V 131, ♂, K, P, Q, rich and proud.
{V 129, ♂, K, P, sh, sx, farmer. / *V 130*, ♀, sx, good family.} 5 dau all K, sx.
V 133, ♂, K, P, sx.
V 136, ♂, K, sx, business ability.
{V 137, ♀, K, P, Q, sx. / *V 138*, ♂, K, sx.}
VI 94, ♀, q?.
{V 139, ♂, K, P, Q, sx. / *V 496*, ♀, I, K, O, p, quiet. (Father, I, married 1st cousin; Father's father and mother's sister, I).}
VI 196a, ♀, K, O, Q, good student.
VI 196b, ♀, K, O, Q, good student.
{V 140, ♀, K, Q, sx. / *V 141*, ♂, K, sx.} 2 dau, K, 9, sx.
V 143, ♂, K, O, Sx_2 when young.

LINE D

III 15, ♂, A, p. See Line C.
{III 17, ♂, A, k, Sx. / *III 18*, ♀, sx, self-respecting.}
{IV 41, ♀, sx, church member, then became o, q, indifferent. / *IV 42*, ♂, A, k, lt, pau, Sx_1.}
{V 101, ♀, K, Sx. / *V 103*, ♂, A, K.}
VI 161, ♀, k, p, q, Sx_1 (has illeg son of 17 yrs, h, Sx, stubborn).
{V 105, ♀, K, pau, r, Sx_1. / *III 4*, ♂, K, Sx_1, illeg (Mother F).}
VI 170, ♂, lt, Sx_2, W.
{V 105, ♀, K, pau, r, Sx_1. / *V 104*, ♂, k.}
{VI 168, ♂, K, p, Q. / *VI 167*, ♀, K?, Lt, p, Q, sx (frat F, chorea, strabismus).}
{V 105, ♀, K, pau, r, Sx_1. / *IV 37*, ♂, A, k, q, pau.}
VI 169, ♀, K, p, q, Sx_2, destroyed own child at birth.
{V 106, ♂, A, lt, pau, p, q, r, Sx_1. / *V 107*, ♀, F, G, K?, Q, Sx_2.} Ch all † young.
{V 108, ♂, A, K, lt, Sx_1. / *V 107*, ♀, F, G, K?, Q, Sx_2.}
VI 173, ♀, G, K?, l, Q, Sx_1.
{V 109, ♂, A, k, lt, pau, q, Sx_2. / *IV 158*, ♀, k, Sx_2 (frat and parents, F, Sx).}
VI 174, ♂, K, gone west.
VI 176, ♂, k, Sx_2.
{VI 177, ♂, A, k, lt, p. / *V 308*, ♀, lt, Sx_2.}
{V 110, ♂, A, k, q, r. / *V 111*, ♀, Sx_2.}
{VI 178, ♀, k, pau, q, t. / *VI 179*, ♂, k, pau.} 3 Ch abandoned on roadside. 1 of 2 survivors F.
{VI 178, ♀, k, pau, q, t. / *IV 144*, ♂, A, G, p, opinionated.} 1 ♂, macrocephalic.
{V 112, ♀, A, K, lt, p, Sx_2, t. / *V 89*, ♂, A, k, p, q, Sx_2.} 9 Ch all k, p, q. See Line C.
IV 44, ♀, sx, † age 28.

III 20, ♀.
cousin
III 19, ♂.
III 21, ♂, C, k, Sx_2.
III 22, ♀.
cousin
III 80, ♂, K, abused wife, carpenter.
IV 57, ♀, r, Sx_2, spoken of as a "fool."
IV 56, ♂, lt, pau, r, caned chairs.
V 145, ♀, Sx_2. / *V 38*, ♂, k, p, q, T. } See Line A.
V 146, ♂, A, C, h, k, lt, o, t, W.
V 323, ♀, K, O, t (of illeg origin).
VI 208, ♀, lt, o, p, q, Sx_2. / *VI 207*, ♂, K?, p. } VII 70, ♂, Q, neat.
VI 208, ♀, lt, o, p, q, Sx_2. / *VI 209*, ♂, A, C, p, Sx_1. } 1, age 3, t, can't talk; 2, young.
VI 210, ♀, K, p. / *VI 211*, ♂, K, sx. } Illeg ♀; 7 yrs, Q, shy.
VI 212, ♀, k, Sx_2, eccentric.
VI 214, ♀, k, q.
V 146, ♂, A, C, h, k, lt, l, o, t, W. / *VI 135*, ♀, A, k, lt, o, q, r. } Slow Ch. Line C.
IV 58, ♀, D, K?, pau, r, Sx_2, eccentric, spoken of as "insane."
IV 59, ♂, F, k, p, pau, r.
V 147, ♂, K, P, sh, self-respecting. / *V 148*, ♀, K, P, sx. } 5 Ch fair to good at school.
V 150, ♀, A, k, lt, Sx_2.
cousin
V 96, ♂, A, k, p.
VI 221, ♀, A_3, C, k, o, Sx_2, W, lies.
cousin
VI 138, ♂, A_3, g, k, p, q, Sx_2.
VI 222a, ♂, C, k, Su, Sx_2, W.
VI 222b, ♂, k, p, q.
VI 224, ♀, A, k, l, q, Sx_3. / *V 85*, ♂, A, k, lt. } ♂, 10 yrs, incorrigible.
V 151, ♀, A, Sx_1. / cousin / *V 97*, ♂, A, k, p. } ♂, C, young.

LINE E

III 24, ♂, went west.
III 25, ♀, lt, p.
cousin
III 26, ♂, H, K, I, in old age, pau.
IV 60, ♂, H, k, p.
cousin
IV 38, ♀, k, o, p, q (had by an r, p, K cousin an illeg son, p, Sx. See Line C).
V 152, ♂, H, lt, p, pau, r, sx, retiring.
cousin
V 84, ♀, A, r, Sx_2, suspicious. (See Line C.)
VI 228a, ♀, A, k, l, p, q, Sx_2, reticent, shy.
VI 228b, ♀, A, k, l, p, q, reticent, shy.
VI 228c, ♀, k, l, q, reticent, shy.
VI 229, ♀, k, l, o, p, q, reticent, shy.
VI 230a, ♂, A, h, k, l, q, Sx_2, lies, suspicious.
VI 230b, ♂, l, q, reticent, shy.
VI 231, ♂, A, k, p, pau, abuses wife, surly, suspicious, vicious.

V 153, ♂, A, p, pau, q.

{V 154, ♀, I, pau, q, r.
cousin
V 86, ♂, A, K, P, Q, ingenious } See Line C.

{V 155, ♀, g, lt, p, q, eccentric, shy.
V 87, ♂, A, K, p, q, quiet.

{V 157, ♀, g, k, lt, p, q, Sx_3.
cousin
V 192, ♂, A, C, k, p, Sx (incest), t, W. } All F. See below. Line E.

{V 158, ♂, A, C, K?, lt, q, Sx_2.
cousin
VI 134, ♀, lt, Q, Sx (Line C). } Two sons F, Sx.

{IV 61, ♂, A, h, k, horse jockey, treacherous.
III 66, ♀, P, sx when yg but later degenerated, † cer. hem. Father self-respecting. Frat. fair. See Line I.

{V 161, ♂, a, k, p, pau, q, stubborn.
V 160, † child-birth.

{VI 234, ♀.
VI 233, ♂. } dau F, k.

{V 161, ♂, a, k, p, pau, q, opinionated, stubborn.
V 162, ♀, k, p, q, sx, opinionated (of good stock).

{VI 235, ♀, K, sx.
VI 236, ♂, K, farmer. } dau K, t, av school work.

{VI 237, ♀, k, o, pau, q, Sh, sx.
VI 238, ♂, A, K, p. } dau Q, playful, not shy.

{VI 239, ♀, K, P, Q, sx.
VI 240, ♂, K, P, Q. } dau Q, cataract, speech defect.

VI 241, ♂, K, P, Q.
VI 242, ♀, Sx_3.
VI 244, ♂, A, C, K, Q.
VI 245, ♂, h, k, p, sx.
VI 247a, ♀, K, l, q.
VI 247b, ♀, G, k, l.

V 163, ♂, A, k, lt, pau, Sx_1.

{V 164, ♀, k, pau, q, Sx_2.
cousin
V 90, ♂, K, p, pau, t, ingenious. } (See Line C.)

{V 166, ♂, a, k, p, q, r, Sx_2.
cousin
V 183, ♀, g, k, p, q, Sx_2, shy, suspicious. (See below.)

VI 257, ♀, k, lt, o, p, q, Sh, shy.
VI 258, ♀, g, k, l, q, shy.
VI 259a, ♀, g, k, p, q, Sx_2, shy.
VI 259b, ♀, g, q, shy.
VI 260a, ♂, k, p, q.
VI 260b, ♂, k, q.
VI 260c, ♂, k, q.

{V 167, ♂, H, K, P, self-respecting.
cousin
VI 141, ♀, g, I, sx, eccentric.

{V 168, ♂, K, P, q.
V 169, ♀, K, O, sh, sx, neat.

VI 262a, ♀, K, p, sx, fair at school.
VI 262b, ♀, K, sx, av at school.
VI 263, ♂, K, L, Q, not shy.

{V 170, ♂, g, lt, p, q, r, Sx, shy.
cousin
V 204, ♀, F, sx, adopted out. (See Line A.)

VI 264a, ♀, k, p, q, Sx_3.

VI 264b, ♀, k, p, q, Sx_3.
VI 264c, ♀, k, l, q, r, shy.
VI 264d, ♀, l, q.
VI 264e, ♀, F, q.
VI 265, ♂, k, q, W, incorrigible.
VI 268, ♀, k, p, q, sx.
cousin
VI 186, ♂, C, k, p, q, Sx_2, W.
} oldest Ch is Ne, F.
V 170, ♂, g, lt, p, q, r, Sx, shy.
V 171, ♀, K, Lt (had by V 27, k, sx, a son, su, and had 2 illeg, F, children, and 1 F).
Twins killed before birth.
1 dau born 1911.
V 173, ♂, A, K, p, pau, q, Sx_2.
V 174, ♀, k, p, pau, q, sx. (Sister of husband of IV 22, Line B.)
1 † inf.
5 ♂, all F, g, k, p, T.
1 ♀, F, o, p, q.
V 175, ♀, K, P, sx, self-respecting.
V 176, ♂, p, sx, church member.
} 3 Ch all K, Q, sx.
V 178, ♀, I (manic depressive?), suspicious, uterine disorder.
V 177, ♂, k, p, sx.
VI 281, ♀, K, O, p, q, Sx (incest).
V 513, ♂, k, l, p, q, of r, Sx family. See appendix to Line E.
} 1 F, g, shy.
1 young.
V 179, ♀, lt.
cousin
V 93, ♂, K, P, self-respect. Frat, Nam-like. (See Line C.)
VI 282, ♂, A, C, k, p, q, mar a prostitute.
VI 284, ♂, A, I, k, Sx_2.
VI 285, ♂, A, h, K?, q, Sx_2, mar a prostitute.
VI 287, ♀, A, k, Sx_1, t.
cousin
V 64, ♂, A, k, p, Sx_1. Line B.
} 2 young Ch, Ne. (See Line B.)
IV 64, ♂, A, K, p.
IV 63, ♀, K, Sx_3.
V 180, ♀, lt, Sx_2.
V 182, ♂, A, k, p, q.
V 183, ♀, g, k, p, q, Sx_2, shy, suspicious.
cousin
V 166, ♂, a, k, p, q, r, Sx_2. (See above.)
} 7 Ch all Nam-like. (See above.)
V 181, ♂, A, k, lt, p, q, Sx_2.
IV 162, ♀, K, lt, q, careful, illeg. (Mother k, Sx. Frat F. See Line H.)
VI 288a, ♂, k, l, p, q, Sx_2.
VI 288b, ♂, k, l, p, q.
VI 288c, ♂, F, l, q.
VI 289, ♀, K, l, q.
VI 290, ♀, k, q, Sx_3.
IV 64, ♂, A, K, p.
III 50, ♀, lt, r, Sx_2. (Sisters Sx. See Line H.)
V 184, ♀, Sx_2.
V 185, ♂, K, p, Q?, Sx.
V 186, ♂, C?, k, p, Sx_2, W.
VI 268, ♀, k, p, q, sx. (See above.)
VI 291, 3 ♀, eldest shows retardation.
V 187, ♀, g, lt, q, Sx_2, shy.
V 188, ♂, of good family with some F.
VI 292, ♂, C, k, l, t, listless.
V 189, ♂, K, sx, neat.
V 191, ♀, p, q.

V 192, ♂, A, C, k, p, Sx (incest), t, W.
V 157, ♀, g, k, lt, Sx_3. (See above.)
VI 296a, ♀, l, Sx_3 (incest).
VI 296b, ♀, l, Sx_2.
VI 296c, ♀, l, q.
VI 296d, ♀, poor speech.
VI 297, ♂, k, p, q, wood-chopper.
V 193, ♂, A, k.
IV 65, ♂, F, k, p, Sx_2, runs house of prostitution.
IV 66, ♀, K, Q, Sx_2.
V 194, ♂, a, K, p, r.
V 308, ♀, lt, Sx_2 (of Sx frat. See Line G).
VI 299, ♀, A, k, o, p, q, Sx_3, filthy.
cousin
VI 231, ♂, A, C, k (of a Nam-like frat).
VI 300, ♂, C, k, W.
VI 301a, ♀, k, q.
VI 301b, ♀, k, q.
V 195, ♀, Q, Sx_3 (had illeg Ch), prostitute out West.

Appendix to Line E

III 84, ♂, H, K, † cancer of throat.
III 85, ♀.
IV 242, ♂, H, K, P, lt, † cancer on face.
IV 241, ♀, F, G, depressed, memory deteriorated.
V 495, ♀, G, K, O, Sx_2, t, persistent, suspicious.
V 494, ♂, a, k, Sx_2, mechanical and inventive, not persistent. (Father g, K, depressed. Father's first wife's son, k, l, p, Sx, W. Mother, h, k, q, Sx, t; her sibs — first one K, Sx, T, W, he had one H, K, Sx dau, one l, Sx, fickle, musical daughter, and one C, W, son. Next one, C, K, p, Sx. Next one, q, Sx, t. Next one, K, O, Q, sympathetic, nervous prostration. Next one, K, q, Sx, W. Last one, p, Sx.)
VI 436, ♀, h, l, p, q, Sx_2, W, stubborn.
VI 437, ♂, C, h, l, p, stubborn.
VI 438, ♀, l, p, q, W, reticent, stubborn, shy.
VI 439, ♀, Q, prompt, even forward.
V 497, ♀, sx.
V 499, ♀, K, O, sx, neat, † cancer of the intestines.
V 501, ♂, K, P, sx, good-hearted, bashful.
V 502, ♀, K, O, Q, sx, excitable, imperious.
VI 441, ♀, E, g, l, q, twitchings.
VI 442, ♀, K, O, q, sx.
VI 444, ♂, K, W, farm-laborer.
VI 445, ♀, q, sx.
V 504, ♂, K, sx, † abcess.
V 505, ♀, † suicide. } 2 Ch † inf.
V 506, ♂, k, † abscess.
V 509, ♂, A, k, lt, o, q, Sh, Sx_1.
cousin
V 510, ♀, k, q, Sh, Sx_3. (Father l, p. 32. Bros. one K, P; one l, p.) } 3 q, p, careless, undependable sons.

Line F

III 26, ♂, H, I (in old age), K, pau.
III 25, ♀, p. } (See Line E.)
III 27, ♂, A, K, pau.
cousin
IV 8, ♀, sx. (See Line A.)
IV 67, ♂, k, p, q.

{III 28, ♂, k, P, went west.
IV 11, ♀, lt, Sx_1.} (See Line A.)

III 29, ♂, A, drowned at 40 yrs.

{III 31, ♂, F, k, p, pau.
IV 6, ♀, Sx_2.} (See Line A.)

LINE G (NAP)

II 15, ♀, pau, "crazy."

II 16, ♂, k, pau.

III 34, ♂, A, K, p, "queer spells."

III 35, ♀, A, eccentric (brother, "degenerate"; brother's son, "medium mentality"; brother's son, eccentric, suspicious, Sx; 2 of his sons eccentric).

(Nar) {IV 104, ♂, H, K, Sh, sx.
IV 103, ♀, k, o, Sx_2.

{V 286, ♀, k, o, filthy, Sx_2.
V 287, ♂, K, Sx_2 (sister, lt).

VI 352, ♂, 2 † inf. E, tumor.
VI 353, ♀, † early.
VI 354 ♂, L, T.
VI 355, ♀, L, o, Sx_3.
VI 356, ♀, A, L, Sx_3, no self-respect.

V 289, ♂, K, P?, q, Sx_1, polite.
V 291, ♂, K, P, † heart disease.
V 293, ♂, K, P, † heart disease.

{V 295, ♀, K, O, Sx?, sh, now st.
V 296, ♂, Sx_1.

VI 362, ♂, K, l, Q.

V 297–298, 3 † yg.

(Nar) {IV 110, ♀, q, r, Sx_2, t, melancholy.
IV 109, ♂, p, q, k, pau, Sx_2.

V 305, ♀, G, O, Q, Sx_3, forward.

(Nar) {IV 112, ♀, r, Sx_2.
IV 111, ♂, I, pau, r, su, Sx_2.

V 306, ♂, 2 † early.

V 307, ♀, Sx_1.

(Line E) {V 308, ♀, Sx_2.
V 194, ♂, a, K?, p, r (sister, Sx; father, F, k, p, Sx; mother, K?, Sx).

VI 299, ♀, A, k, p, q, o, Sx_3, filthy.
VI 300, ♂, C, k, W.
VI 301a, ♀, k, q.
VI 301b, ♀, g, k, l, q, shy.

(Nar) {IV 114, ♂, A, k, q.
IV 113, ♀, r, Sx_2, † Tb.

V 309, ♂, † 6 yrs Tb.
V 310, ♀, l, Sx_3, W.
V 311, ♀, prostitute, rebellious.

IV 115, ♂, A, C, k, l, q, r, Sx_2.
IV 116, ♂, A, K, P?, q.
IV 117, ♀, Sx_2.

{IV 119, ♀, Sx_2.
cousin
IV 120, ♂, medium mentality.

{IV 122, ♀, F, Sx_2.
IV 121, ♂, F, l, lt, cripple.

{V 318, ♀, K, Sx_2, eccentric.
cousin
V 317, ♂, k, eccentric, suspicious.

VI 376, ♂, k, p, q, eccentric, suspicious.
VI 377, ♂, k, q, p, eccentric, suspicious, syphilitic, elated.

V 319, ♀, idiot, macrocephalic, has never walked.
V 320, ♂, † yg.
IV 123, ♀, Sx_2.
IV 125, ♀, Sx_2.
III 38, ♀, p, Sx_2. (See Line B, III, 8.)
(Nat) { III 41, ♂, K, Q, P, ingenious, polite, † liver trouble.
III 51, ♀, boisterous, profane, † heart disease.
IV 130, ♂, P, K, Q.
{ IV 132, ♀, K, r, Sx_2, t.
IV 131, ♂, K, sx.
V 326, K, Q, sx.
V 327, a, c, L, Q.
{ *IV 133*, ♂, K, q, Sx_2, farm laborer.
IV 138, ♀, Sx_2 (formerly), now sx.
V 331, ♂, h, k, p.
V 333, ♀, K, O, sx.
V 334a, ♀, K, P, Q, sx.
V 334b, ♀, K, Q, sx.
V 335, ♀, g, Q, shy, sx.
V 337, ♂, L, Q.
V 338, ♀, sx.
IV 140, ♀, k, Sx_2.
IV 141, ♂, k, p, W.
IV 142, ♂, K?, p, Sx_2.
{ IV 144, ♂, A, G, k, p.
VI 178, ♀, k, t, C, p, pau, q, Sx_2. (See Line D.)
{ IV 145, ♀, Q, K, Sx_2, T, O.
IV 146, ♂, K, p, q.
{ V 341, ♀, E, I.
V 340, ♂, A, K.
VI 381, ♂, K, Q.
VI 382, ♀, sx.
{ V 344, ♀, K, sx.
V 343, ♂, K, P, sx, farmer.
VI 385, ♀, K, sx.
{ V 346, ♂, k, p, q, T.
V 345, ♀, K, l, O, Q, sx.
VI 386a, ♂, l, q.
VI 386b, ♂, l, q.
VI 386c, ♂, l, q, shy.
VI 386d, ♂, l, q, shy.
VI 387a, ♀, l, q, shy, sx.
VI 387b, ♀, l, q, sx.
VI 387c, ♀, l, q, poor memory.
VI 387d, ♀, l, q, poor memory.
V 348, ♀, K, sx.
V 349, ♂, k, q, Sx_2, suicide.
V 350, ♂, K, P, sx.
V 350b, ♂, K, sx, teamster.
V 351, ♀, A, o, q, Sx_2, boisterous, forward.
{ IV 151, ♀, F.
IV 150, ♂, K, P, q, sx.
V 354, ♂, C, k, Sx_2, cruel.
VI 199, ♀, lt, Sx_2. (Line A.)
{ V 355, ♀, lt, Sx_2, vicious. } 1 son at 17 yrs, C.
V 73, ♂, p, A, C, k, Sx_2. (Line B.) } 2 others, F.
V 356, ♂, lt, Sx_2, t, vicious.
V 357, ♀, K, T, sx, O.

V 359, ♀, K, sx, not very intelligent.
{ III 42, ♀, hypochondriacal, self-respecting.
{ *III 43*, ♂, A, K, genial.
{ IV 153, ♂, K, quiet.
{ *IV 154*, ♀ (illegitimate origin), E.
{ V 360, ♂, K, Q, sx, blacksmith.
{ *IV 174*, ♀, K, Q, sx.
V 375, ♀, l, Sx, vicious.
V 376a, ♂, K, sx.
V 377, ♀, P.

LINE H

{ II 18, ♀, p, q, Sx_2.
{ *II 19*, ♂, p, pau, Sh.
{ III 45, ♀, lt.
{ *III 44*, ♂, K, farm laborer.
IV 155, ♀, lt, r, Sx_1.
IV 156, ♂, 4 gone west.
IV 157, ♀, † asylum, 5 yrs.
{ III 46, ♀, k, lt, Sx_2.
{ *III 47*, ♂, ineffective, k, Sx_1.
{ IV 158, ♀, k, lt, Sx_2.
{ *V 109*, ♂ (Line D), A, k, pau, q, Sx_2.
VI 174, ♂, K, gone west.
VI 176, ♂, k, Sx_2.
VI 177, ♂, A, k, lt, p.
III 48, ♂, one gone west; 1 † ulcerated tooth at 22 yrs.
III 49, ♀, lt, Sx_2, 3 illeg children.
{ III 50, ♀, lt, r, Sx_2.
{ *IV 64*, ♀ (Line E), A, K, p.
V 184, ♀, Sx_2.
V 185, ♂, p, Q?.
{ V 186, ♂, C, p, K?, W.
{ cousin
{ *VI 268*, ♀, k, p, q, sx. (Line E.)
VI 291, ♀, l.

THE NATS (LINE I)

{ II 21, ♂.
{ II 20, ♀.
III 51, ♀, boisterous, lt, profane, † heart disease (see Line G).
III 52, ♀, went west.
III 54, ♀, K, sx, neat (see Line C).
{ III 55, ♀, neat, sx.
{ *III 56*, ♂, K, Q, attempted suicide.
{ IV 169, ♂, A, C, Sx_1, W, vicious.
{ *IV 168*, ♀, r, Sx_2 (had 5 illegit. children; 4 efficient, 1 I; 1 bro. sx, Q; 1 sister Sx, W; 1 sister K, O, Sx, with 14 children, 10 unfit; 1 with E).
V 371, ♂, A, Sx, vicious, profane.
V 372, ♀, E, pau.
V 373, ♀, k, o, Sx_2.
IV 170, ♂, 2, A, C, vicious.
IV 171, ♂, A, K?, quarrelsome, C, gone west.
IV 172, ♀, K, sx.
III 61, ♂, K, P, sx, sh.
{ III 62, ♂, K, P, sx, careful.
{ *III 63*, ♀, k, L, p, Sx?.
{ IV 174, ♀, K, Lt, Q, sx.
{ *V 360*, ♂, K, Q, sx (see Line G).
V 375, ♀, l, q, Sx, C.

V 376a, ♂, K, sx.
V 377a, ♀, P.
{IV 175, ♀, K, Q, sx.
{*IV 176*, ♂, A, k, p, W.
V 378, ♂, † 3 months.
V 379, ♂, A, k, l.
V 381, ♀, L, Q, respected.
{IV 178, ♀, K, Q, sx.
{*IV 177*, ♂, A, K.
V 384, ♀, 385, moved away.
V 387, ♂, A, K.
IV 179, ♂, † 1 yr, pneumonia.
IV 180, ♂, C, K, L, P.
IV 181, ♀, lt, Sx_1. (Father, A, Sx; mother, Sx; 5 bros and sisters Sx and 1 C; 2 nieces prostitutes; 1 nephew, C.)
V 388, ♂, K, L, Q, nervous (at 9 years).
{II 23, ♂, K, inefficient, self-respecting.
{II 24, ♀.
{III 66, ♀.
{*III 69*, ♂, K, pau, q, farmer.
{IV 200, ♂, K, sx, farmer.
{*IV 199*, ♀, K, sx, hypochondriac.
V 409, ♂, K, sx.
V 410a, ♀, L, sx.
V 410b, ♀, L, sx.
{IV 201, ♀, K, Q, sx, independent.
{*IV 202*, ♂, A.
V 411, ♀, L, Q.
V 412, ♂, L, Q.
IV 203, ♂, K, sh, sx.
IV 205, ♀, sx.
{IV 207, ♀, K, q, sx, depressed.
{*IV 208*, ♂, K, Q, sx, little persistence.
V 416, ♂, a, K, q, quiet, squint.
V 418, ♂, K, p, sx, quiet.
V 420, ♂, E, K, sx, farm laborer.
V 422a, ♂, L, q.
V 422b, ♂, L, q.
V 422c, ♂, L, q.
V 423, ♀, l, q, sx.
{IV 209, ♀, sx.
{*IV 210*, ♂, K, O, sx, q (by his first wife, E, had 1 E and 1 Sx dau).
V 425, ♀, gone to Pennsylvania.
{IV 212, ♀, E, t, q.
{*IV 213*, ♂, Q, K, amnesia, delusions, fickleness.
V 435a, ♂, a, h, K, l, p, q, Sx_2.
V 435b, ♂, E, k, l, q, Sx_2.
V 436, ♂, C, I, k, l, q, Sx_2.
V 438, ♀, E, K, t.
V 440, ♂, K, l, q, sx, religious fanatic.
V 441, ♂, K, l, p, Sx_2, eccentric, vicious.
V 443, ♀, macrocephalic dwarf, boisterous, cretin, high arched palate.
V 444, ♂, † 13 mos, after spasms.

17. The Population Considered

The total number of individuals considered in this study is 1,795. They may be divided into two groups, namely those descended from the original Nam and eligible to a place on the large chart and those not so descended and, therefore, not so eligible. In the following table the numbers of both classes are grouped by generations.

Gen.	I	II	III	IV	V	VI	VII	VIII	Total
Nam	1	13	29	70	194	397	146	2	852
Out	3	17	59	185	415	237	26		943
Total	4	30	88	255	609	634	172	2	1,795

18. Social Statistics

The social condition of this population may now be summarized to advantage and compared in detail with the Jukes. The total number of Nams of whom the sex is known is 784 as contrasted with 540 of Juke blood, or about 45 percent more of the Nams than of the Jukes. The relation to wedlock of the parents of 695 of these is known; of these 20.2 percent were born out of wedlock. In the case of the Jukes the proportion is 19.6 percent or essentially the same. Harlotry is ten times as common as professional prostitution among the Nams. Apparently prostitution was relatively much commoner among the Jukes, perhaps because they lived nearer a large city. Perhaps for the same reason, while there were 37 cases of syphilis recorded by Mr. Dugdale among the Jukes, only one case is recorded among the Nams. The first known case of this disease among the people we are considering appeared two generations ago and the person affected did not live near Nam Hollow. The towns of K. and I. have had cases of syphilis for twenty years past. In A., E., and Q. the disease has appeared only recently; while, on the other hand, it has long been in the large city of N. Syphilis is now, however, spreading rapidly toward Nam Hollow, and unless stayed, it will yield the same fruits of dependency that it produced among the Jukes. The number of Nams who have been in the County poorhouse is 11 as compared with 53 Jukes; but this tells little about relative mental capacity; for, the Nam population is so far removed from social influences that they get along with very little, depend upon each other, and relatively rarely appeal to the overseer of the poor.

Alcoholism is extraordinarily high. Of the females 88 percent and of the males 90 percent are given to drinking in excess.

One hundred and eighty children of all considered here were born out of wedlock. There are 232 licentious woman and 199 licentious men as contrasted with 155 chaste women and 83 chaste men.

Combining the Nams and out blood we find 19 epileptics, 24 insane of whom 7 have been in custodial care, three in a girl's Home, 15 in the Orphan Asylum, and 40 in State's Prison or in jail.

The direct expenditure of public funds in the case of the Nams is kept low owing to the fact that they are largely outside public ken and public control; but the saving to the state by this neglect is heaping up a debt that must some day be paid with compound

interest. Assuming the cost to the state of persons in institutions is $200 per year we have the following estimate of expenditures:

Institution for the insane	$8,400
Institution for the feeble-minded	1,900
House of Refuge	800
State's prison and jail	21,026
County House	32,350
Out-door aid	8,750
Hospital	550
Orphan Asylum	12,450
Boys' Reformatory	2,800
Total	$89,026

In addition we may, following Dugdale, enter the following items of cost to the state:

Cost of maintaining 25 prostitutes at $300 per year, avg. 15 yrs.	$112,500
Time lost from productive industry by prostitutes	31,750
Loss by curtailment of life, in prostitution	30,000
Number of premature deaths of children per year, 22 in 75 years, say 1,000	
Cash cost of each child at $50	50,000
No. of arrests and trials, about 50; cost at $100	5,000
Cost of depredations of 18 thieves	25,000
Murders at $1,200	2,400
Arson, property destroyed	3,000
Property destroyed in brawls, etc., say	10,000
Capital tied up in brothels	3,000
Total	$ 272,650
Drink bill, 700 alcoholics, paying $50 per year for 30 years	$1,050,000
(partly paid for by $170,400 U. S. pension money)	
Total of public funds, expended, cost of crime and premature deaths, and drink bill for past 75 years	$1,411,676

This total happens to come out close to Dugdale's total for the Jukes, but it includes an estimate for the drink bill which Dugdale's did not. Even though the drink bill be excluded productive labor to at least the same amount is lost through drink.

19. The Inheritableness of the Non-social Traits

That heredity plays a part in determining indolence, alcoholism, licentiousness and shyness cannot be doubted, and it is clear that the result is influenced by conditions of life. The investigation of the relative influence of these two components in determining the frequency of these traits in any community requires even a higher order of analysis than this paper affords data for. Nevertheless it will be worth while to analyze the data supplied by the present study to see what light they throw upon the subject.

a. Indolence

Our data afford us a number of families where both parents are indolent, others where both are industrious, and others still where one parent is indolent and the other industrious. We have tabulated the fraternities, 30 in number, derived from two industrious parents, without regard to grandparents. Of a total of 82 known children from such

matings 73, or 90 percent, are industrious. When, on the other hand, both parents are indolent no regard being had to grandparents, then out of a total of 34 known children, 26 are unindustrious, or 76.5 percent. When a typical unit character is missing in both parents it is missing in all of their offspring. Now, neither mating behaves like pure absence of a character. The fact may be that we are here not dealing with a unit character or, the classification being rough and non-quantitative, it may be that the imperfect result is due to that circumstance. On the latter hypothesis it may well be that indolence is a unit character and industry is the lack of an inhibitor that restrains us from work—that laziness is the normal condition and the lover of work has sluffed off a natural dislike to effort. If this is true a lazy person of a pure lazy strain should have all lazy offspring. On the other hand a lazy person, one of whose parents was industrious, mated to an industrious person should expect to have about half of his offspring lazy. Unfortunately we cannot distinguish by any somatic character a lazy person carrying industry from a lazy person of pure strain. But we have two clear matings of industry and laziness where the lazy parent (mother) had two lazy parents; of 10 offspring 9 were lazy and only 1 industrious like the father. This supports the hypothesis that laziness carries an inhibitor which is transmitted to the offspring. Consequently, two lazy parents may become the founders of industrious strains, but indolent strains arise chiefly, if not exclusively, by marriage with indolent persons. Such matings are eugenically unfortunate.

b. Alcoholism

By this term is meant the condition of the steady, as opposed to the periodic or occasional, drinker. Alcoholism is besottedness. In our families there are 9 matings of two alcoholic parents, giving rise to 21 children about whose relation to alcohol something is known. Every child, including 15 men and 6 women, becomes alcoholic. When, on the other hand, both parents are temperate, in 16 matings, producing 45 children about whose relation to alcohol something is known, only 37 are temperate, or 82 percent. If we divide the fraternities into two lots: (*a*) those that contain no alcoholics and (*b*) those that actually contain alcoholics as well as non-alcoholics, then in lot *b* there are 63 percent non-alcoholic. If we should include also those families (unknown) which though potentially capable of producing one in four children alcoholic actually, because of the small size of the family (2 or 3) produce none, we should increase the proportion of non-alcoholics toward the 75 percent which is to be expected on the assumption that alcoholism is due to a defect, a lack of control, perhaps, of appetite. When one parent, usually the father, is a sot and the other has self control, then actually in 25 fraternities, comprising 95 children whose relation to drink is known, 64 percent have self control. If we consider separately the fraternities that contain both alcoholic and non-alcoholic persons then we find 55 percent of the offspring with self-control, which approaches close to the expected 50 percent, following the hypothesis that temperance is due to a positive determiner—self-control.

In relation to the sex of the alcoholic offspring this remarkable result appears—that whereas alcoholism is shared equally by both sexes of the fraternity derived from

two alcoholic parents it is rarely found in the daughters when the mothers are temperate, but almost exclusively among sons. The case reminds one of sex-limited characters like color blindness and hemophilia, where the daughters of affected fathers are unaffected but may transmit to their sons. This resemblance is probably only an accidental one, however, for in England and Wales the convicted habitual inebriate females are three times as numerous as the convicted habitual inebriate males.*

When both parents are alcoholic, out of 21 children studied 8 or 38 percent were imbecile or epileptic; when only one parent (mostly the father) was alcoholic, out of 94 known children 13 or 14 percent were imbecile or epileptic. When both parents were temperate, out of 45 known children 9 or 20 percent were imbecile, none epileptic. There is here a marked preponderance of imbecility and epilepsy in the offspring of two feeble-minded parents. When the mother is not alcoholic, whether the father is or not, the frequency of imbeciles in the progeny falls strikingly. So far as this fact goes it is in harmony with the conclusion that alcoholism in the mother affects the mental development of her children.

c. Licentiousness

The network of the Nam and allied families is characterized by a large amount of harlotry and prostitution; in fact they are the main anti-social acts of this locality. These people have lived, for the most part, in the hills away from civilization and those influences that maintain the social ideals. It is clear to the careful observer that the marriage relation does not receive the recognition in Nam Hollow which society places upon it elsewhere. Nevertheless the ideals of marriage and chastity are universal through this region, only their importance is insufficiently recognized, largely because the mentality of the people is not capable of appreciating their importance. Now, wherever the ideal is there will be those whose makeup is such that the ideal appeals strongly to them or who find it easy to respond by their acts to it; but there will also be those whose makeup is such that the ideal does not appeal or that it is difficult for them to meet it. Thus it is plain that the environmental conditions and the constitution of the individual here, as everywhere, play a part in determining his reactions or behavior.

That the hereditary constitution plays an important part in determining the result is indicated by the existence of strains that are strongly chaste and others that are prevailingly licentious; and the fact that two sisters belonging to a complex strain, but reared under the same environment, will react very differently. Thus in Line I the strain which starts with III 66 and III 69 has produced chaste offspring in two generations owing to the constant marriage of its members into chaste strains, except that one daughter, IV 212, married a man who belonged to a neuropathic strain and had among her 8 children a religious fanatic, a macrocephalic dwarf, and 4 highly erotic males. On the other hand, the descendants in Line A of IV 11 a probably feeble-minded harlot, and her two consorts, III 86 and 28, are prevailingly licentious even to the third generation (Fig. 1).

Let us now consider the sort of progeny that arise from the different matings. First,

* L. D. Mason: A Study of the Social Statistics of 4,663 Cases of Alcoholic Inebriety. Jour. of Inebriety, July, 1890.

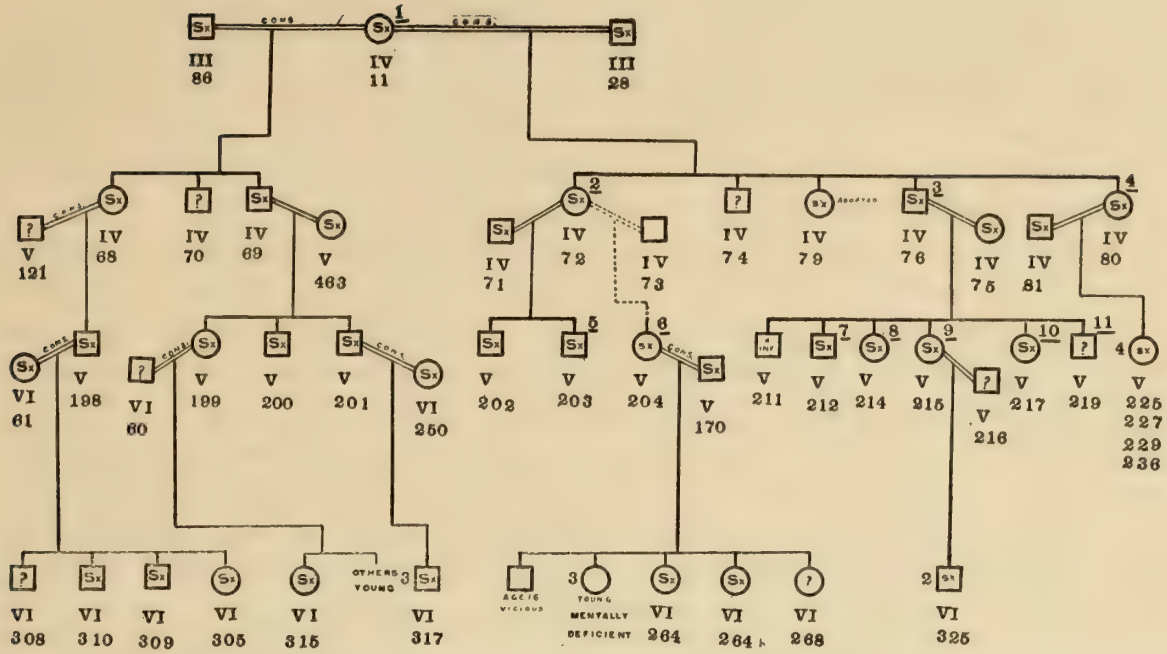

FIG. 1. A group in which both chastity (sx) and licentiousness (Sx) appear. Environmental factors have here no doubt played an important rôle. Certain members of this group show entire lack of self-control. V 203 has committed rape; others, like VI 76 and V 212, incest. *Notes:* 1, has cohabited twice. 2, illegitimate child and has cohabited. 3, has committed incest with a daughter. 4, licentious when young. 5, in State Prison for rape. 6, adopted when young; considered chaste. 7, committed incest with sister. 8, epileptic; low-grade feeble-minded; incest with father and brother. 9, erotomaniac. 10, erotomaniac. 11, vicious, alcoholic.

if both parents are chaste practically all of the children are chaste. The most striking exception is the case of the IV 55 × IV 54 mating (Fig. 2). IV 55 was an industrious, surly but chaste man and his wife is believed to have been equally chaste. All of their

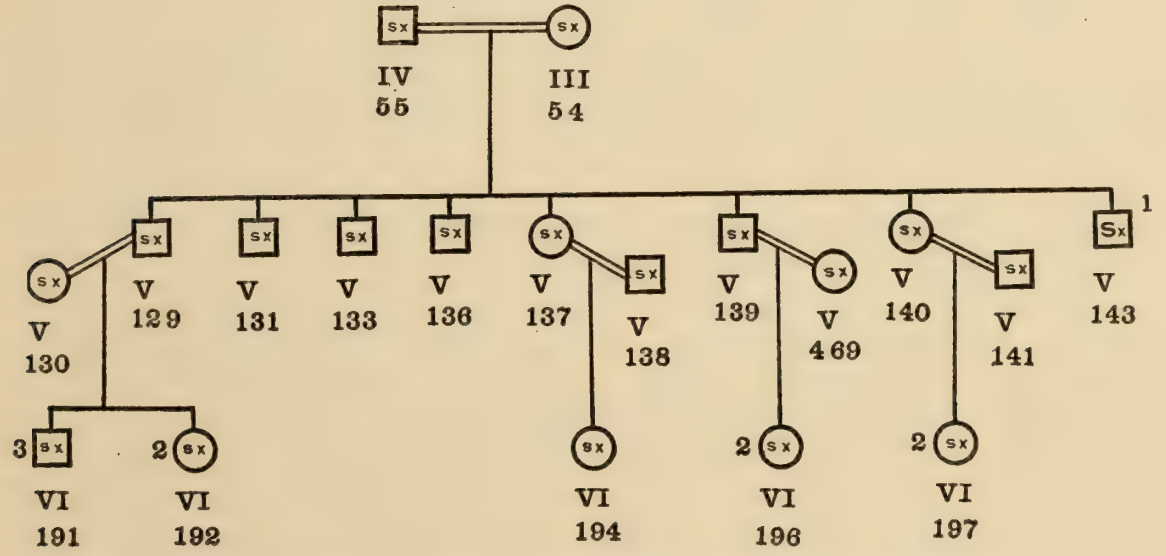

FIG. 2. A mating of chaste with chaste, having chaste children. Sx indicates that the individual is licentious according to advanced social ideals; sx that the individual is chaste according to the same ideals. V 143 is the father of an illegitimate child.

eight children were chaste except V 143, who is active and industrious, was the father of an illegitimate child in his youth but married later and has been a chaste and faithful husband. Here, probably, a nearly universal practice among the young men of the neighborhood had led an essentially chaste man for a short time into irregular practices, It is suggestive that, out of 29 offspring of such chaste matings, none is alcoholic, epileptic, or criminalistic and only one is given as feeble-minded.

Second, if both the father and the mother are licentious the condition of the progeny is in striking contrast to the foregoing (Figs. 1 and 3). Of 48 persons whose sex reactions are known, only 6 are chaste, or 12 percent. Four of these are in one fraternity, and are derived from IV 81 (who died 21 years ago so that few details are to be had about him) and IV 80 who died 6 years ago and is said to have been licentious in her youth, but chaste after her marriage. She was industrious and active and brought up her family well. There were four daughters, all alike—industrious and chaste. In the other case we have the father, VI 422, an industrious, careful, skillful workman, but dishonest, untruthful, alcoholic and licentious; and the mother, IV 133, a lazy, disorderly, alcoholic, causationless basket-maker, licentious when young, and since marriage the mother of 11

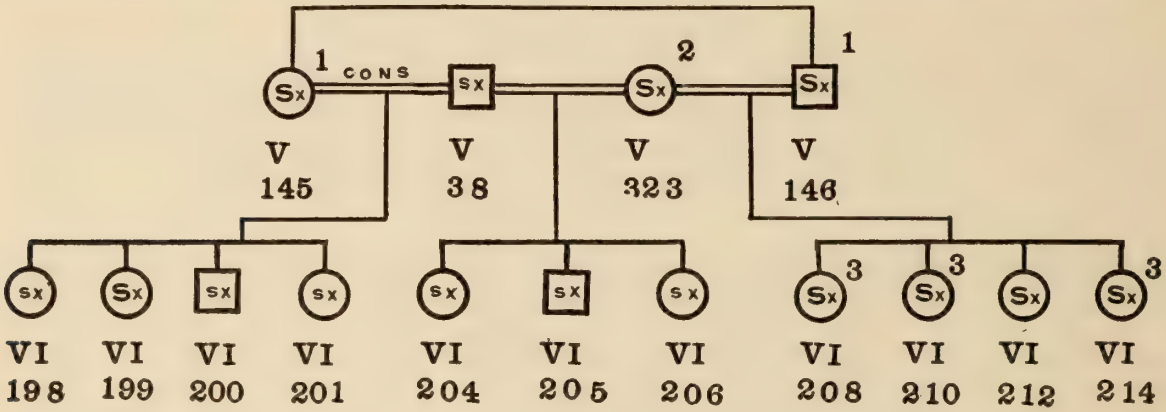

FIG. 3. A series of matings which point to the dominance of sex control over its absence. The individuals VI 198 to VI 214 inclusive were all reared in the same bad environment. Sx, licentious. sx, chaste. Cons, consanguineous marriage. *Notes:* 1, no sex control. 2, not vicious; deserted her husband for another man. 3, has had an illegitimate child.

children. All the children who have matured have proved to be licentious except VI 33. This girl was, when young, adopted and reared by a good family; she could not advance in school, and when she returns to her old home she reverts to lazy, slovenly ways but she is chaste and now married. Here we seem to see the clear effect of a good training inculcating a lesson of sex control which tided the girl over until she married. But her essential traits seem to have undergone little change by the good bringing up.

If one of the parents is licentious while the other is chaste, we have a mixture of chaste and licentious progeny (Fig. 3). In 60 cases about one third of the children are chaste and two thirds licentious; and the proportion is about the same whether the father or the mother is the licentious parent.

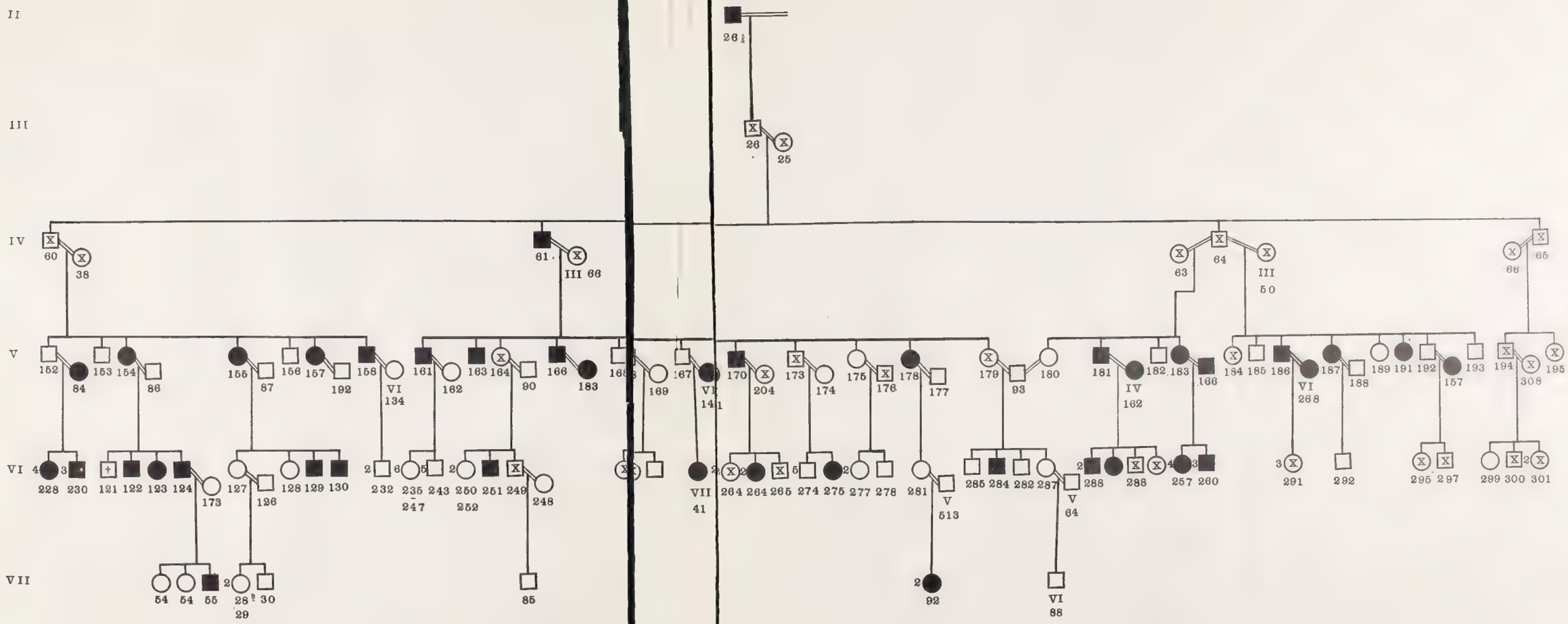

FIG. 4. Pedigree showing inheritance of shyness. Black symbol, shy individual; squares, male; circles, females; *x* unknown; † dead. The numbers below symbols are for reference to text. The numbers to left of symbols indicate number of individual of the given sex and characteristics.

d. Forwardness vs. Shyness.

An ability to meet people on equal terms and to mix with them is a normal trait of man. We may call it forwardness and the lack of the trait shyness or aloofness. Shyness is frequently found among people that live in out-of-the-way places and there is a tendency to ascribe it solely to training or lack of experience in meeting people; but there are several objections to this view. First, this shyness is not striking in all isolated communities but only in certain ones, and these are usually highly inbred communities in which this one trait has become widely disseminated. Second, even in cities and in active communities the extremes of shyness or diffidence, as well as of forwardness are encountered. Third, in Nam's Hollow, in identical environment, very forward and very shy people, even children, are met with. In one branch of the Nams the absence of forwardness is striking and has been made a special object of study (Fig. 4). A remote ancestor, II 26, is said by old residents to have been "of a shy disposition." One of his sons married a first cousin and had four children; but it was not possible to find out anything about this trait in three of them. The fourth, IV 61, lacked the trait of forwardness,—was shy. In the subsequent generations, V, VI, VII, shyness appeared in a large proportion of the highly inbred individuals. The mating of the first of the IV generation is with a cousin; whether either parent was shy is unknown; but the germ-plasm was probably defective in forwardness; and of 7 offspring 4 lacked forwardness. The mating of the second member of the fraternity was with an outside family with fair traits. Of 11 children the condition of the trait is unknown; 5 are shy and 3 forward. In each mating of the third member of the fraternity approximately half of the progeny are shy. In the progeny of the fourth member of the fraternity the two children are not known to be shy.

The consequences of the different matings may now be tabulated:

	Known offspring are: forward	shy
Both parents known to be forward	5	1
One parent forward, the other shy	18	14
Both parents shy	0	14

This table supports our hypothesis that there is a factor for forwardness and that shyness is due to its absence. Consequently, if both parents be shy all offspring will be shy. This hypothesis accounts for the fact that shyness is common in just these out-of-the-way, and hence inbred, communities. The inbreeding secures the result that both parents shall contain germ cells with the defect—the condition under which the defect (shyness) makes its appearence.

20. Consanguinity in Marriage

No fact is more obvious and appalling than the great amount of consanguinity in marriage in this family. Table A gives the facts in detail. This shows that there are 3 cases of the union of fourth cousins, 21 of third cousins, 11 of second cousins, 16 of first cousins, one case of uncle and niece, three of father and daughter, and four of brother and sister, yielding two offspring, now dead. In one generation, the third, over half

TABLE A

CONSANGUINITY IN MARRIAGE

Generation.	Consanguineous Matings.												Out Matings.	Total Matings.	Percent Cons. Matings.
	Bro. × Sis.	Fath. × Dau.	Uncle × Niece.	1st Cousin Removed:		2d Cousin Removed:		3d Cousin Removed:		4th Cousin Removed:		Degree not Known.	Total Cons. Matings.			
				0	1	0	1	0	1	0	1					
Nam I														1	1	.00
II												1	1	7	8	12.50
III				2	3							5	10	7– 1	17– 1	55.55
IV	0–1	0–1		1–2	1	3	2					4	11– 4	36– 3	47– 7	27.77
V		0–2	1–0	4–0	1–0	1–0	3–0	9–2	7–0			1	25– 4	80–27	107–31	21.00
VI	1–2			1–0	0–1	1–0	1–0	0–1	2–0	1–2			7– 6	44–23	51–27	16.67
VII														2– 1	2– 1	.00
Total	1–3	0–3	1–0	8–2	5–1	5–0	6–0	9–3	9–0	1–2		11	54–14	177–55	233–67	22.67

Note: Number at left of hyphen indicates the number of matings with children; the number at the right indicates the number of matings without offspring.

of the matings (55.55 percent) are consanguineous; in another, the fourth, nearly one-third. Nearly a quarter of all matings of Nams are consanguineous. This extraordinarily high percentage of consanguineous marriage is due, as always, to the presence of certain barriers to the free selection of marriage mates. Originally the barrier was probably mainly physiographic; for the original home of the Nams, in Massachusetts, was in a mountain valley. But after they had moved out of the valley they were still separated by social barriers from their neighbors, both through a sort of clannishness on the one hand and their unsavory reputation among their neighbors on the other. As the family increased in numbers and enlarged the periphery of its dwelling area it was inevitable that proportionately more out-matings should occur. And so, though the number of cousin marriages increases generation by generation, that of the out-matings increases still more rapidly, and the proportion of consanguineous matings falls. One might hope that the introduction of new blood would lead to better progeny, and there is a tendency that way, but unfortunately the law that like tends to marry like interferes with the beneficent tendency of out-matings. The consorts selected from outside are frequently quite as defective as those who select them.

The consequences of this close intermarrying are interesting to note. The most instructive case is found in Line E. Here III 26 married his cousin III 25 and had five children, one of whom, IV 60, married his cousin and had seven children. Of these, five married, each one a cousin. The product of these five cases of cousin marriges through three generations is as follows:

1. Eleven children, seven survived infancy; all slow in movements, unambitious, unable to learn at school and except one, reticent and shy. With perhaps one or two exceptions, all are alcoholic and licentious.

2. Six children, four survived infancy; all slow, unambitious and, for the most part, alcoholic and licentious.

3. Nine children, four surviving infancy. The parents are both of better quality than in the last two cases. Two children are slow, indolent, unambitious, alcoholic and licentious; the other two are industrious, neat and temperate.

4. Seven children, one died at three years, and one is only two years old. All the others are feeble-minded on the basis of school work, and, of these, two are already licentious.

5. Two children, both feeble-minded and licentious.

Most of the children who have married have married cousins; their progeny fifteen years hence will make an instructive study; but the experiment will meanwhile have cost the state a pretty penny.

One sees, from a study of the progeny of these cousin marriages, the astonishing uniformity that has been reached, if we except two of the children of the third mating where the blood has not yet lost all of its "good" traits. This group of cousin marriages was selected solely because of its extensiveness. The result is practically the same in all long-continued cousin marriage inside the Nam family. It is apparently not the consanguineous marriage *per se* that causes the emptiness of the result but the fact that where emptiness marries emptiness the product is emptiness.

21. Fecundity

The alleged rapid increase of the socially inadequate is sometimes attributed to the relatively larger families of the defective classes as compared with the socially fit. Our

TABLE B

Fecundity in Nam and Out Bloods

Generation.		Females Having Only One Child.	Females Having Two Children Only.	Females Having Three Children Only.	Females Having Four Children Only.	Females Having Five Children Only.	Females Having Six Children Only.	Females Having Seven Children Only.	Females Having Eight Children Only.	Females Having Nine Children Only.	Females Having Ten Children Only.	Females Having Eleven Children Only.	Females Having Twelve Children Only.	Females Having Thirteen Children Only.	Females Having Fourteen Children Only.	Females Having Fifteen Children Only.	Average Fecundity.
I	Nam																
	Out			1					1								5.500
II	Nam					2											5.000
	Out	1	1	3	2	1	2		1	1							4.500
III	Nam	2	1			2	1			1							3.285
	Out	4	4	3	1	2	1	1	2	1	3	2					5.208
IV	Nam	4	1	1	5	1	2	1	2	2							4.578
	Out	16	14	9	6	7	2	6	6	2	2	2		1	2		4.444
V	Nam	5	10	7	9	1	4	1	1	6		1				1	4.478
	Out	13	23	15	6	6	6	6	1	1	1	1		1			3.587
VI	Nam	11	9	11	5	4	1	1	2	1		1					3.282
	Out	8	9	1	3	1											2.090
VII	Nam																
	Out	2															1.000
Total	Nam	22	21	19	19	10	8	3	5	10		2				1	4.025
	Out	44	51	32	18	17	11	13	11	5	6	5		2	2		3.954
Grand Total		66	72	51	37	27	19	16	16	15	6	7	0	2	2	1	3.979

data enable us to say what is the size of family in the extensive group of these classes that we are considering here. Table B gives the number of children born to mothers: *a*, who are of the Nam blood, and *b*, who are from outside blood. The total number of Nam mothers recorded here is 120, the total number of their children is 483, the average, 4.025 children per parent. There are 217 mothers of the out blood, they bore 858 children, or an average fecundity of 3.954 children to a mother. The difference is not significant. The mothers of generations V and VI are still reproducing, and for that reason the fecundity as given in the table does not give their full reproductive potentiality. Omitting the mothers of these last generations from consideration the average fecundity of mothers is 4.222. Even this average is not large; for the fraternities from epileptic mothers of New Jersey is 6.0 (see Davenport and Weeks, 1911, p. 27). Among the Nams the most frequent number of children in a fraternity is 2; a result that is rather astonishing. However, the average fecundity of 4.2 is much greater than that of the most cultured families of the eastern United States. Consequently, they are falling behind even such a degenerate population as this.

22. Causes of Death

It would be interesting, if it were possible, to compare the causes of death of this highly inbred community with that of the average population of a large area like the State of New York or the entire United States, as given in the census returns. But, unfortunately, a close comparison is not possible, just because our records of causes of death were gained, for the most part, from the common people whose knowledge of the

TABLE C

Distribution of Causes of Death per 1,000 Deaths

	N. Y. State.		Special Dis.			N. Y. State.		Special Dis.	
	General Classes.	Special Dis.	Nams.	Outsiders.		General Classes.	Special Dis.	Nams.	Outsiders.
General diseases	472				Respiratory diseases	154			
measles		13	8	12	pneumonia		106	177	130
diphtheria		16	15	12	pleurisy		3	8	8
typhoid fever		36	8	12	Digestive diseases	61			
colitis, diarrhea,					diseases of liver		10	8	8
enteritis		67	138	101	Urinary diseases	45			
old age		30	269	267	Bright's disease		32	23	20
tuberculosis		112	108	109	nephritis		5	8	8
cancer		30	15	41	Female diseases	3		0	0
dropsy		13	15	12	diseases of pregnancy	10	10	39	45
Diseases of nervous					Diseases of bones, skin,				
system	117				etc.	3			
apoplexy		27	8	20	Skin diseases	2	2	0	16
paralysis		23	23	20	Diseases absorbent				
epilepsy and convul-					system	1		0	0
sions		18	8	28	Accidents and injuries	50			
Circulatory diseases	76				Suicide		5	8	20
heart disease		72	8	20	Other accidents		50	100	81
diseases of arteries		3	8	8	Totals	1,002		1,002	998

causes of death of their relatives is often very vague. Nevertheless, the causes as stated will give information that is valuable enough to warrant a table of them. Such a table is given in Table C both for the Nams and for the outsiders who married into the Nam family. In the lower lines of each half of the table is given the sum of the diseases for all ages, then the relative frequency of each cause on the basis of 1,000 deaths, and, below that, the relative frequency of each disease for the United States as taken from the Census Report of 1900. Not all of the classes of disease mentioned in that report are recorded from the Nams, but the more frequent causes of death are found in both lists. A comparison shows, first an enormous preponderance of deaths from "old age" among the Nams. This means probably that the informant did not know the immediate cause but answered the question offhand, "Old age," meaning merely that the person in question had passed the meridian of life. However, among the Nams is an exceptionally large number of old persons. Aside from this class, that of diarrheal diseases, mostly infantile, is the most frequented. This doubtless corresponds with a real weakness, in part the consequence of dirty homes. The same explanation will account for the high mortality from diseases of pregnancy and childbirth. Pneumonia also runs high and this is doubtless a real characteristic of these people. On the other hand tuberculosis is not above the average; but this is probably because many senile deaths from tuberculosis have been classified under "old age." The great deficiency in heart disease and digestive diseases is doubtless to be accounted for in the same way. Deaths from accidents are high, as might be expected in a dull and drunken community. Among the outsiders epilepsy and suicide are unusually common as causes of death,—evidence of the neuropathic constitution of the population.

It may be worth while to compare the age at death of the Nams and Outsiders with the population of New York State in general. This is done in Table D. The most striking fact in this table is the high incidence of infantile deaths, corresponding with the heavy incidence of mortality from diarrhea. The heavy death rate among the Nams in the third decade (which appears also in Table B) is doubtless due in part to early deaths from tuberculosis, and in part to the action of "the fool-killer" *i. e.*, causes depending on lack of intelligence or quickness in avoiding danger. The heavy selection of the early years results in a hardy stock with a small death rate in middle life, bringing some up to 90 years and beyond. The Outside families are more like the population at large. Since the statistics for the Nams and the Outs were gained in the same way we are justified in concluding that the difference in the age distribution of deaths is a significant one.

23. Relative Effect of Changing the Environment and Changing the Blood

The question is sometimes discussed whether a particular act was determined by heredity or by environment. In this form the question has no sense, for every act is determined both by the nature of the stimulus (environment) and of the reacting protoplasm, and the nature of the reacting protoplasm is largely determined by heredity. One may with more reason inquire, in any particular case, which plays the greater part in determining the result. For it is obvious that some natures require a slighter stimulus

TABLE D

TABLE OF DEATHS CLASSIFIED ACCORDING TO AGE AT DEATH

Age.	New York State, 1907.			Nam.			Out.		
	Deaths by Age.	Percent of Total Deaths.	Av. Percent of Total Deaths Each Year.	Deaths by Age.	Percent of Total Deaths.	Av. Percent of Total Deaths Each Year.	Deaths by Age.	Percent of Total Deaths.	Average Percent of Total Deaths Each Year
Under 1 year	27,764	18.9	18.9	59	29.5	29.5	28	15.8	15.8
1 year	6,413	4.4	4.4	10	5.0	5.0	4	2.2	2.2
2	2,706	1.8	1.8	5	2.5	2.5	4	2.2	2.2
3	1,692	1.1	1.1	0	.0	.0	4	2.2	2.2
4	1,198	.8	.8	0	.0	.0	2	1.1	1.1
5–9	3,206	2.2	.44	1	.5	.1	7	3.9	.78
10–19	5,195	3.5	.35	6	3.0	.3	4	2.2	.22
20–29	10,854	7.4	.74	21	10.5	1.05	17	9.6	.96
30–39	13,933	9.5	.95	24	12.0	1.20	19	10.7	1.07
40–49	14,369	9.8	.98	13	6.5	.65	16	9.0	.90
50–59	15,206	10.4	1.04	10	5.0	.50	18	10.2	1.02
60–69	17,660	12.0	1.20	13	6.5	.65	17	9.6	.96
70–79	16,479	11.2	1.12	25	12.5	1.25	24	13.5	1.35
80–89	8,898	6.1	.61	9	4.5	.45	10	5.6	.56
90–unknown	1,274	.9	.1	4	2.0	.20	4	2.2	.22
	35	.0	.0						
	146,882	100		200	100		178	100	

to the performance of a given act than others; so one may say that environment has played a slighter rôle in the first case than in the second.

To get at the relative rôle played by heredity and environment in determining some of the biographies given in this memoir we propose to consider three sets of phenomena: *a*, a comparison of the fraternities derived from first and second marriages; *b*, the effect of removal of young children from bad home environments by adoption or by life in an orphan asylum; *c*, the consequences of the removal of a branch of the family to a new locality.

a. Comparison of Half Brothers and Sisters

FIRST CLASS. *The mother is common to the two half-fraternities*

Case 1

Children by first father:

IV 68 ♀ imbecile harlot.

IV 69 ♂ unambitious, unindustrious.

First father:

III 86 ♂ ignorant and lazy.

Common mother:

IV 11 ♀ ignorant, cohabited widely, chaste later in life. One sister a harlot; one chaste; all but one of brothers unambitious and alcoholic.

Second father:

III 28 ♂ ambitious; went west; at least 2 of his 4 brothers were industrious; 3 of 4 alcoholic; 2 simple-minded.

Children by second father:

IV 72 ♀ mentally slow.

IV 80 ♀ active and industrious; licentious when young.

IV 76 ♂ active, industrious, irascible, vicious, committed incest with daughter.

Note: The children by the second father show more industry—a trait obviously derived from their father's side of the house.

Case 2

Children by first father:

VI 208 ♀ sluggish, indolent, disorderly, listless, had illegitimate child.

VI 210 ♀ industrious but unambitious, had illegitimate child.

VI 212 ♀ unindustrious, eccentric at times, formerly a harlot.

VI 214 ♀ slow, indolent, has one illegitimate child.

First father:

V 146 ♂ sluggish, irascible at times, indolent alcoholic wanderer, in state's prison for assault with intent to kill. Has an ignorant, licentious sister.

Common mother:

V 323 ♀ an illegitimate child; industrious, neat, alert, resourceful, slightly irascible .

Second father:

V 38 ♂ sluggish, "easy going," unindustrious, calm, unambitious, good-natured, mildly intemperate, lives in poor circumstances. Has a brother like himself and one who is an ambitious machinist, also an industrious sister.

Children by second father:

VI 204 ♀ good at school, quick to grasp ideas, active, neat, industrious, chaste.

VI 206a ♀ good at school, quiet, industrious, chaste, despite unchaste environment.

VI 206b ♀ good at school, quiet and shy.

VI 205 ♂ good at school, active, industrious.

Note: The second father clearly brings in the better blood.

Case 3

Children by first father:

VI 145 ♀ average at school work, quiet, active and industrious; a church member.

VI 143 ♂ average at school, active, industrious, ambitious, chaste.

First father:

V 97 ♂ lazy, unambitious. Had unambitious, causationless, alcoholic sister; an industrious, ambitious but alcoholic brother, and a lazy, unambitious brother.

Common mother:

V 98 ♀ somewhat educated, chaste and quiet. Had two lazy, inefficient brothers, an inefficient, alcoholic father, and a chaste, capable mother.

Second father:

V 99 ♂ industrious and chaste; mild drinker.

Children by second father:

VI 148 ♀ industrious; weak eyes, retarded at school.

VI 147 ♂ average at school, quiet, active, industrious.

Note: This result is noteworthy and indicates not only a strong maternal germ-plasm but doubtless also good maternal culture.

Case 4

Children by first father:

VI 32 ♂ two, both industrious and honest.

First father:

V 35 ♂ industrious, respected, chaste.

Common mother:

V 36 ♀ industrious, active, chaste, respected. Has 5 brothers: 2 industrious, 4 with wandering tendency, 3 unambitious, 2 lazy.

Second father:

V 37 ♂ lazy, licentious, alcoholic.

Children by second father:

VI 34 ♀ active, neat, chaste, refined appearance.

VI 33 ♂ sluggish, lazy, unambitious, alcoholic, vicious.

Note: Despite the good mother the vicious traits of the second father reappear in his son.

Case 5

Children by first father:

VI 98a ♂ lazy, licentious, alcoholic, imbecile.

VI 98b ♂ vicious, has run away and whereabouts are unknown.

First father:

V 71 ♂ Negro, lazy, shiftless, alcoholic.

Common mother:

V 72 ♀ imbecile, lazy, unambitious; lives in poor conditions; has received much outdoor aid. Has a lazy, licentious brother who served a term for arson and a term for threatening to kill.

Second father:

V 470 ♂ lazy, disorderly, causationless, talkative, illiterate.

Children by second father:

VI 101 all children (7) are incapable of learning at school, all but one are slow, and unindustrious, one is macrocephalic, one is a harlot and one is talkative. None is alcoholic, vicious or very licentious.

Note: Alcoholic and vicious tendencies appear in the children of the first father but not in those of the second.

SECOND CLASS. *The father is common to the two half-fraternities*

Case 1

Children by first mother:

VI 198 ♀ active, industrious, economical, orderly, chaste.

VI 199 ♀ ignorant harlot.

VI 201 ♀ indolent, irascible, uneducable but chaste.

VI 200 ♂ industrious, ambitious, chaste but mentally somewhat deficient.

First mother:

V 145 ♀ ignorant and licentious, married young. Has a brother who is indolent, irascible, disorderly, alcoholic wanderer who has been in state's prison for assault with intent to kill.

Common father:

V 38 ♂ sluggish, "easy going," unindustrious, unambitious, calm, good-natured, mildly intemperate: lives in poor circumstances. Has one brother like himself and one who is an ambitious machinist, also an industrious sister.

Second mother:

V 323 ♀ an illegitimate child, industrious, neat, alert, resourceful, slightly irascible.

Children by second mother:

VI 204 ♀ good at school, quick to grasp ideas, active, neat, industrious, chaste.

VI 206a ♀ good at school, quiet, industrious, chaste, despite unchaste environment.

VI 206b ♀ good at school, quiet and shy.

VI 205 ♂ good at school, active, industrious.

Note: There is a relative lack of intelligence and scholarship in the children of the first mother.

Case 2

Children by first mother:

V 36 ♀ industrious, active, chaste, respected.

V 21 ♂ industrious, alcoholic Civil War veteran.

V 23 ♂ industrious, ambitious, temperate.

V 25 ♂ unambitious, licentious wanderer.

V 28 ♂ unambitious, lazy Civil War veteran.

V 33 ♂ sluggish, lazy alcoholic wanderer.

First mother:

IV 232 ♀ industrious, chaste, thrifty. Has 2 brothers; lazy, unambitious, eccentric, the other "not bright."

Common father:

IV 9 ♂ generally indolent and unambitious, irascible, alcoholic.

Second mother:

IV 10 ♀ chaste, active, industrious, from a family of the same kind.

Children by second mother:

V 42 ♀ industrious, orderly, chaste.

V 38 ♂ slow, unambitious, calm, good-natured, mildly intemperate.

V 39 ♂ slow but industrious, without ambition, alcoholic.
V 41 ♂ industrious, ambitious, chaste machinist, mildly alcoholic.
Note: There is a wandering tendency in the children of the first mother that is quite absent in those of the second.

Case 3

Children by first mother:
V 180 ♀ harlot.
V 183 ♀ sluggish, lazy, unambitious, shy, suspicious harlot.
V 181 ♂ illiterate, unambitious, inefficient, alcoholic, licentious.
V 182 ♂ unambitious, inefficient, alcoholic.
First mother:
IV 63 ♀ a prostitute; industrious and somewhat refined.
Common father:
IV 64 ♂ industrious, unambitious, alcoholic. Lived in a log hut in the woods. Has three brothers, all indolent and unambitious; 1 a procurer; 1 dishonest and treacherous; 1 honest and of good report. Their parents were paupers.
Second mother:
III 50 ♀ a causationless harlot; two lazy harlot sisters.
Children by second mother:
V 184 ♀ harlot.
V 187 ♀ shy, unambitious harlot.
V 189 ♀ industrious, neat, chaste.
V 191 ♀ quiet, unambitious.
V 185 ♂ unambitious but steady worker.
V 186 ♂ irregularly industrious, somewhat vicious, unambitious, a wanderer.
V 192 ♂ unindustrious, irascible, vicious, alcoholic. Committed incest; in jail for assault, larceny, arson, burglary; a wanderer.
V 193 ♂ lazy, alcoholic.
Note: The paternity of V 189 may well be doubted, on the face of the returns. A wandering tendency appears in the children of the second mother only. Otherwise the similarity of the two mothers results in a striking similarity in their children.

Case 4

Children by first mother:
IV 146 ♂ sluggish, unambitious, industrious.
IV 147a ♂ industrious and chaste.
IV 147b ♂ industrious and chaste.
IV 148a ♀ industrious and chaste.
IV 148b ♀ industrious and chaste.
First mother:
IV 149 ♀ industrious, quiet, and chaste; of illegitimate origin.
Common father:
IV 150 ♂ quiet, ambitious, industrious and chaste.
Second mother:
IV 151 ♀ "not bright mentally."
Children by second mother:
V 354 ♂ unindustrious, licentious, vicious, cruel to wife.
V 355 ♀ vicious, mannish-appearing harlot.
V 356 ♂ vicious, irascible, licentious.
V 357 ♀ industrious, neat, good-natured, considered chaste.
V 358 ♂ industrious but not very ambitious.
Note: The superior product of the first wife's germ-plasm is noticeable.

b. Consequences of Change of Environment through "Placing Out" or Asylum Life

If the behavior of the child is determined chiefly or very largely by the home conditions under which it is reared, then a child who is early taken from home and reared under different conditions from those that surround the rest of the fraternity would develop

differently from them. The proposed test is complicated by the fact that all of the members of a fraternity have not the same germinal potentialities, so that final differences cannot, with certainty, be ascribed to differences in the environment. But if, on the other hand, the child who has been brought up in the new environment remains like most of its fraternity who have been brought up in the old environment, the result speaks for the conclusion that innate capacity for response plays the greater rôle in determining the nature of a person's reaction.

Case 1 (V 204)

Her mother was feeble-minded, cohabited with several men and belonged to a fairly industrious but criminalistic fraternity. Her father was industrious; he deserted his wife. V 204 was the only one of her fraternity. She was born at Nam Hollow in 1864. Was adopted when young and brought up to appear quite lady-like in dress and actions. She was, however, shallow-minded and showed little grasp. She married V 170 (an illiterate, feeble-minded, tactiturn man), a second cousin, and thus came back into the environment into which she was born. She was considered chaste. Of her 6 daughters two are prostitutes, 4 lack industry, one is shy and causationless. The son who grew up is lazy, vicious and a wanderer.

Case 2 (V 219)

This man belongs to a fraternity of 5, of whom two committed incest and two others are erotomaniacs; one sister is epileptic; another, though an erotomaniac, is industrious, ambitious and quick in actions. Their mother was an illegitimate child and was a lazy harlot; their father was industrious but committed incest on a daughter. The home conditions were those of paupers. V 219 was born in Vermont, 1880, and when young was adopted and reared by good people; but in spite of that he developed the "characteristics of the blood." He was irascible, inefficient, indolent, unambitious, alcoholic and, though he married a good woman, he has become a pauper.

Note: The violent sex impulses were, apparently, either absent from his make up or else inhibited by good culture.

Case 3 (VI 18)

The mother, born 1839, in Ireland, was an ignorant, industrious harlot who had one chaste and one licentious sister. The father was a lazy, ambitionless, good-natured, garrulous, alcoholic vagrant who was very licentious and lived in a hut in the mountains; but he has industrious, ambitious, respected brothers and sisters. Of the two sons, one went west, thus revealing some ambition, while the other lived at home as a quiet, industrious, ambitious person, who was considered chaste and died at 23 years from the kick of a horse. It is his sister (VI 18, b. 1872 at Q) who is the present case. She left home when young to do housework in a good family, went to school and got a good education; appears neat, industrious and chaste.

Note: At first sight one would be inclined to attribute to the better influences met at housework the rise of VI 18 above her parentage. But there are doubtless good innate elements, and some of these are shown in the aunts and uncles on both sides of the house and also in the ambition shown by her brothers. It is a reasonable hypothesis that the germ-plasm has determined this ambition.

Case 4 (VI 222)

The mother (V 150) was an illiterate, indolent alcoholic. She had an alcoholic sister and a self-respecting ambitious industrious brother. The father (V 960) was a lazy, unambitious alcoholic; he had an insane sister and two alcoholic brothers, of whom one was ambitious and industrious and the other not. The eldest sister of VI 222's fraternity could not learn at school, and was an indolent and alcoholic harlot and, finally, prostitute. A sister was quite like her with a tendency to lie, steal, and wander in addition. The two brothers who form the present case entered the Orphan Asylum at 8 and 4 years respectively. The elder boy was lazy and ran away, led a licentious life, and drowned himself at 19 years. The other was "placed out" when 9 years old, and has developed into a typical Nam.

Note: The Orphan Asylum, though it offers a better environment than the home, has not altered the innate traits of these children.

Case 5 (VII 33)

The mother is a lazy, disorderly, causationless, licentious alcoholic who does washing and makes baskets. She has had 11 children and lives in a hovel in squalid conditions. Her own sisters were mostly harlots and

alcoholics—a "bad lot." The father has stronger traits; he can read and write, has some mechanical ability and is industrious, prompt and careful in his work. But he is dishonest in word and deed, alcoholic and licentious and lives in shack in squalor. Of their 7 children whose traits can be studied, two sons are teachable and chaste, two are Nam-like, one is an apathetic idiot and epileptic, and one daughter is feeble-minded. The case in question, VII 33, is the younger daughter, born at N. H. in 1888. She was adopted when young and reared by a good family in B. She is now, at 23 years, lazy and shiftless, but chaste. When away in Vermont she dresses neatly; but when in Nam Hollow she reverts to the old slack and slovenly ways. She cannot learn at school; is married but childless.

Note: Here the good conditions of her adopted home are perhaps responsible for her sex-control (though it must not be forgotten that she has two chaste brothers who have been brought up at their own home), and they have given her ideals of neatness in dress, but they have had little influence on her deeper nature. This case reminds one of the effect of Indian School training on Indian girls.

Case 6 (VII 59)

The mother is illiterate, indolent, unambitious, irascible, and deserted her children. The father is indolent and a pauper. When the deserted children (both girls) were found, they were placed in the Orphan Asylum at 6 and 5 years respectively. The elder was placed out at service when 10 years old and is now (at 16) doing well and living chastely, but is about three years retarded in school work. Here good home life has probably restrained sex-impulses. Her sister was sent to the State Institution for Feeble-minded Children where, at the age of 15 years, she can add to 20, reads in the second reader, spells well, irons neatly but speaks imperfectly.

Cases 7 and 8 (V 310 and 313)

We have here to do with two sisters. Their mother was a causationless harlot who lived in a hovel near A and died in 1887 after a year's illness with tuberculosis. The father is ignorant, slow in movements, indolent, works irregularly, is methodical and calm and was formerly alcoholic. After his wife died he sent his children to the Orphan Asylum while he lives in a hovel on G. His fraternity is characterized by harlotry among the women and, in one case, by criminality.

The elder daughter was 11 years old when placed in the Asylum. She could not be taught even to set the table; she can do no sort of house work or many of the simpler things of life. The Asylum placed her out with a married pair 25 years her senior; she had sexual relations with the man of the house and, finally, a child by him, born in 1890 in the County House. She was then sent back to the Orphan Asylum. She was soon placed out again, and again she became pregnant by the man of the house. Then they married her off, in 1903.

Her sister (V 310) is two years younger and came to the Orphan Asylum at the age of 9 years. She was placed out from there in 1888 and again in 1892, but neither time could she be controlled; but proved always disobedient and licentious. Finally, she ran away and is now a prostitute in the assignation section in ——. She had an illegitimate child in 1894 who is now with its father's family.

Note: In these cases the Asylum life and the placing out have had no beneficial effect. They do not appear to have strengthened the resistance to sex impulses.

Summary.—The foregoing cases apparently justify the conclusion that placing out in better families and asylum life gives a veneer of culture and tends to strengthen the sex impulses but that the effect is uncertain and frequently discouragingly slight.

c. Consequences of Removal of a Strain to a New Locality

In the period just following the Civil War several of the Nams migrated from the Nam Hollow region in New York State to G. County in Minnesota and settled there. Miss Saidee C. Devitt, Field Worker of the State School for the Feeble Minded at Faribault, Minnesota, has very kindly investigated these people. The information which she gathered has been condensed and is given below. The reference numbers are the same as those used in the general description. The description of these individuals follows.

IV 5. Male, b. 1830, N. Y. When young, IV 5 went to Minnesota and always lived

there. He was extremely alcoholic, but was spoken of as being "of average mentality." He was always energetic. He married a woman from New York State, by whom he had three boys and three girls. The boys are not energetic, are alcoholic, and were slow pupils in school. "The boys have little force and are not ambitious to save their money and get along in the world." The girls have done better than the boys. One daughter married a farmer, a man of no force, who inherited his farm. They have several children, but none of them has much mental capacity, all being below the average. All live in Minnesota.

IV 16. Male, b. 1831. He went west to Minnesota in 1856. There he married IV 17, a woman from New York State. IV 16 was an extreme alcoholic. He reformed at one time, and became a church member for a few years, then lapsed and resumed his drinking habits. He was always a hard, steady worker, being a strong, powerful man, but was never able to advance and never amounted to anything. He always lived in Minnesota and died there in 1908 of dropsy. His wife was also addicted to the use of liquor. She is spoken of as, "a character." One day, after giving birth to twins, she walked a distance of two miles or more into town, followed by all her children, to find a saloon in order to appease her desire for alcohol. She is now living among her children—two girls and six boys. The boys are farmers and are all shiftless and alcoholic. They also live in Minnesota. The two girls are married.

IV 19. Male, b. 1840, E. Went to Minnesota in 1863 after leaving the army where he had served a year. He soon returned to New York State where he again enlisted. He returned to Minnesota in 1865 where he now lives. He drank heavily at one time, then became intensely interested in religion, and in 1875 gave up alcohol and has never touched it since. He is illiterate, but an interesting talker, and has "a fairly good mentality." He is upright, honest, and is a respected citizen. He owns a comfortable home and a nice farm. Now, at the age of 71, he is a hale and hearty old man, still very active and energetic. He has been east many times. He married IV 18 in New York State before going west. His wife is now 70 years old, and is still active and bright, and is doing her own work. She is about the average woman of her class. Both IV 19 and his wife are courteous and cordial and are old fashioned and simple in their conversation and manners.

They have five sons and two daughters all married and living in Minnesota. The sons are inefficient, not energetic, and all are more or less alcoholic, although they are much better now than formerly. Their only education came from the country school during the winter. One of the sons, formerly a heavy drinker, reformed and is said to be interested in the Salvation Army work. The two girls married and are doing much better than the boys. One married a refined, educated, literary man. Of their children, the girls are bright and talented, one of them is a school teacher, and they resemble their father. The boys, however, are not as "bright" as the girls and resemble the Nams.

V 52. Male, b. 1837, N. Y. Married when young, went west and acquired a comfortable home and a 160-acre farm. He later sold the farm and moved to town. He entered the flour business, extended credit to everyone, and soon failed and lost all he

had. He was alcoholic and did not seem to get along in town life. He married and had five boys and four girls, all of whom are married and living in Minnesota. All the boys are dissipated, unambitious, and do not succeed. One of the girls has been married and divorced and is now cohabiting. None of the children are of average intelligence. V 52 died of catarrh of the stomach in 1907. His wife died of heart trouble many years ago.

V 54. Male, b. 1840. Married in New York State, he went west to Minnesota when young and has always lived there. He worked steadily, but was unambitious and did not prosper. He was always a heavy drinker and also licentious. Now he works but little and lives around among his children. His wife was unambitious like himself. She was a sort of midwife for the neighborhood in former days; she is now dead. They had one girl and nine boys. All the boys are alcoholic, but naturally "smart," except one who is shiftless, indolent, unambitious, and mentally deficient. They have had no training. All are married and live in Minnesota. In early days, V 54 was considered "smarter" and more energetic than V 52.

V 75a. Male, b. 1858, N. Y. When young he lived in New York State, and was spoken of by the people as "slow mentally." He went west about 1880 and settled in Minnesota. He married twice, both wives being energetic women who have made him what he now is. By his first wife, who came from a good respectable family, he has one daughter. His second wife was a very capable woman who had left her first husband. By the second wife he has one son who is a dentist. V 75a is honest, upight, and respected. He is now blind.

An observant man, a doctor in Minnesota, has described this group of the Nam family in the following words. "The Nams, except IV 19 and V 75a, were of the inefficient, worthless sort, not lazy and not criminal in any sense of the word. Most of them were fairly honest—perhaps some of them might not return a purse if they found it. None of them were ever arrested except for drunkenness. There seems to be little licentiousness in the family. People sneer at them and they perhaps represent the poorest part of the population."

What then has been the effect of the changed environment on these individuals? Do the individuals and their offspring reared in a new and better environment resemble their parents and show the characteristics of the blood? Or has a new and better environment such as exists in this county in Minnesota (where an equal chance was given to all) improved their condition? IV 19 went west when young, gave up his drinking habits, married, and acquired a comfortable home. What are his children? The sons are inefficient alcoholics; the two girls, however, are better. But the male offspring of one of these girls is like their Nam ancestor. IV 16, a shiftless man, who was also alcoholic, has six sons, all inefficient and alcoholic. Other cases might be cited. The same mental traits which characterize the Nams in New York State are reported in the new home of the Minnesota Nams independently by a reputable physician and also by a field worker. Yet those who migrated were of more ambitious make up than those who stayed behind. The data in regard to these who were born and reared in an entirely different environment from that in which their parents were born, seem to show that it is the inherent mental

traits present in the germ-plasm which plays a dominant part in determining the behavior and reactions of the individual.

24. Social Prophylaxis

Although our primary aim is to present the bare facts we cannot altogether neglect the natural inquiry as to the proper treatment of such a condition as we have described. Various possible modes of treatment will be considered.

First, there is the method of *laissez faire*. The Nam community takes care of itself to a large extent; why do anything? Unfortunately the community is not wholly isolated. From it families have gone to Minnesota and other points in the West and there formed new centers of degeneration. Harlots go forth from here and become prostitutes in our great cities. The tendency to larceny, burglary, arson, assault, and murder have gone, with the wandering bodies in which they are incorporated, throughout the State and to great cities like New York. Nam Hollow is a social pest spot whose virus cannot be confined to its own limits. No State can afford to neglect such a breeding center of feeble-mindedness, alcoholism, sex-immorality, and infanticide as we have here. A rotten apple can infect the whole barrel of fruit. Unless we abandon the ideal of social progress throughout the State we must attempt an improvement here.

Second, there is the method of improving the conditions of the persons in the Hollow. The district might be supplied with trained nurses who should teach housekeeping and the elements of hygiene. Unquestionably an improvement of conditions might thus be made. Doubtless more marriages would be legalized, harlotry might be diminished, the number of infant deaths decreased, and a number of persons be brought to sign the pledge. It might be that the improvement of the dress and costumes of the people would make it possible for them to secure a better grade of mates and thus to produce a stronger progeny. Thus good would come to the next generation though the third would be fraught with greater danger. But most of the work would be supplying a veneer of good manners to a punky social body.

Third, the people might be scattered in the expectation that they would then outmarry and marry better. But this experiment would be fraught with danger even if it were feasible. It would increase the centers of indolence and alcoholism—for like seeks to mate with like wherever it finds itself.

Fourth, the most radical measure, the surest though perhaps the most expensive, would be to take the children and youth whose family history yields little hope that they will be the parents of socially desirable stock and place them, throughout the reproductive period in one of the State Villages for the non-social. They would leave no progeny and so the worst of the strain would, by the end of 35 or 40 years, be brought virtually to an end. Of course, asexualization would produce the same result; but it is doubtful if public sentiment would favor such treatment, quite within the province of the State though it be. Segregation in a self-supporting colony would meet the needs of the State in a way less repugnant to modern ideals.

Literature Cited

Davenport, C. B., and David F. Weeks, 1911. A First Study of Inheritance in Epilepsy. Eugenics Record Office, Bulletin No. 4.

Dugdale, R. L. The Jukes. A Study in Crime, Pauperism, Disease, and Heredity. New York, 1877.

Southard, E. E., 1912. Notes on the Geographical Distribution of Insanity in Massachusetts, 1901–1910. American Breeders' Magazine, Vol. III, pp. 11–20.

GENERATION II

GEN. III

GEN. IV.

GEN. V.

GEN. VI.

GEN. VII.

CHART — Genealogical Tree of the Nam Family. Squares indicate males, circles females, numbers in squares indicate the number of individuals represented by the symbol. Roman numerals refer to the generation

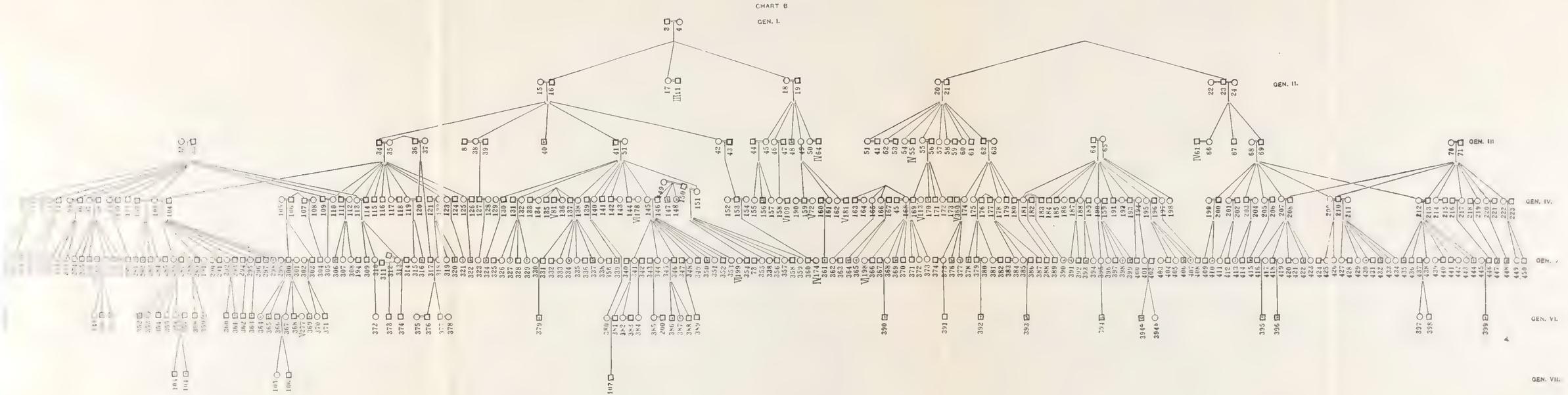
CHART B
GEN. I.
GEN. II.
GEN. III
GEN. IV.
GEN. V.
GEN. VI.
GEN. VII.

CHART C

AMERICAN BREEDERS' ASSOCIATION
EUGENICS SECTION

E. E. SOUTHARD, Chairman (1912) | H. H. GODDARD, Vice Chairman (1912) | CHARLES B. DAVENPORT, Secretary

THE EUGENICS RECORD OFFICE

COLD SPRING HARBOR LONG ISLAND, N. Y

Established in October, 1910, this Office aims to fill the need of a clearing house for data concerning "blood lines" and family traits in America. It is accumulating and studying records of mental and physical characteristics of human families to the end that people may be better advised as to fit and unfit matings. It issues blank schedules (sent on application) for the use of those who wish to preserve a record of their family histories.

The Eugenics Section and the Record Office which has been from its inception affiliated with it, are a development of the former committee on Eugenics which comprised well-known students of heredity and humanists; among others, Alexander Graham Bell, Washington, D. C.; Luther Burbank, Santa Rosa, Cal.; W. E. Castle, Harvard University; C. R. Henderson, University of Chicago; Adolf Meyer, Johns Hopkins Medical School; J. Arthur Thomson, University of Aberdeen; H. J. Webber, Cornell University; Frederick A. Woods, Boston. The first chairman of the Section was David Starr Jordan, Stanford University. The work of the Record Office is aided by the advice of a number of technical committees. Its superintendent is H. H. Laughlin, Cold Spring Harbor, N. Y., to whom correspondence should be addressed.

PUBLICATIONS

OCTAVO SERIES

BULLETIN NO. 1. Heredity of Feeblemindedness. H. H. GODDARD. April, 1911 ..... 10 cents.

BULLETIN NO. 2. The Study of Human Heredity. C. B. DAVENPORT, H. H. LAUGHLIN, DAVID F. WEEKS, E. R. JOHNSTONE, HENRY H. GODDARD. May, 1911 ..... 10 cents.

BULLETIN NO. 3. Preliminary Report of a Study of Heredity in Insanity in the Light of the Mendelian Laws. GERTRUDE L. CANNON and A. J. ROSANOFF. May, 1911 ..... 10 cents.

BULLETIN NO. 4. A First Study of Inheritance in Epilepsy. C. B. DAVENPORT and DAVID F. WEEKS. November, 1911 ..... 20 cents.

BULLETIN NO. 5. A Study of Heredity of Insanity in the Light of the Mendelian Theory. A. J. ROSANOFF and FLORENCE I. ORR. October, 1911 ..... 15 cents.

BULLETIN NO. 6. The Trait Book (with colored frontispiece and one text-figure). C. B. DAVENPORT. February, 1912 ..... 10 cents.

BULLETIN NO. 7. The Family History Book. C. B. DAVENPORT and others. August, 1912 ..... 25 cents.

BULLETIN NO. 8. Some Problems in the Study of Heredity in Mental Diseases. HENRY A. COTTON. August, 1912 ..... 15 cents.

QUARTO SERIES

MEMOIR NO. 1. The Hill Folk; report on a rural community of hereditary defectives. With three charts and four text-figures. FLORENCE H. DANIELSON, M.A., and C. B. DAVENPORT. August, 1912. 56 pp. $0.75

MEMOIR NO. 2. The Nam Family; a study in cacogenics. With four charts and four text-figures. ARTHUR H. ESTABROOK and C. B. DAVENPORT. September, 1912. 85 pp. $1.00

HV
6125
E6

Estabrook, Arthur Howard
The Nam family

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY